ACME FAMOUS No 7

SCIENCE FICTION

TALES OF WONDER 50¢

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by FESTUS PRAGNELL

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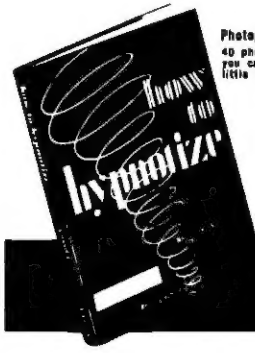

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Cover by Frank R. Paul — Robert A. W. Lowndes, *Editor*

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Down To Earth

As we start volume two of *FAMOUS SCIENCE FICTION,* it might not be amiss, for the sake of new readers, briefly to re-state the aims and intentions of our magazine, of which an overwhelming majority of you, the active readers, have expressed positive approval.

In general, we aim to offer you an opportunity of reading stories which originally appeared in science fiction magazines before the beginning of what is generally called the "modern era", inaugurated by John W. Campbell when he became editor of *ASTOUNDING STORIES* in late 1937. Our cut-off date (generally, not absolutely) is therefore 1937; for the most part, we will not present stories which appeared later than that year. It is not that no good stories of the older type appeared later, but rather that most of the better and best examples have appeared in various anthologies and collections which are either still in print, or are available from dealers in science fiction books at reasonable prices. The old magazines (1926-1937) not only command high prices relative to their original cover prices — 15c to 50c — but are increasingly difficult to find at any price at all.

We are limited by the fact that a certain number of these old stories are not available to us, and the fact that a certain number of them, even though available, are too long; either these longer ones could not be fitted into a single issue of FSF at all, or would not leave space for anything else, and we do not feel it wise to present full-length material. Since FSF appears quarterly, and my schedule (there are four other titles I handle: *EXPLORING THE UN-*

What Lay Behind The Scholar's Fear?

. . . Probably it was the strange unhealthy look of utter absorption with which my employer listened, more than that damnable passage from the *Necronomicon,* which caused my nervousness and made me start violently when, toward the end of my reading, I heard an indescribable slithering noise in the hall outside. But when I finished the paragraph and looked up at Carnby, I was more than startled by the expression of stark, staring fear which his features had assumed—an expression as of one who is haunted by some hellish phantom. Somehow, I got the feeling that he was listening to that odd noise in the hallway rather than to my translation of Abdul Alhazred.

You Won't Want To Miss

THE RETURN OF THE SORCERER

by Clark Ashton Smith

Complete in the Spring Issue of

STARTLING MYSTERY STORIES

see page 127

KNOWN, MAGAZINE OF HORROR, STARTLING MYSTERY STORIES, and *WORLD-WIDE ADVENTURE)* does not allow for any more issues per month than I am already doing, serials in FSF must be ruled out. The record shows that readers will tolerate a two-month wait between installments of a serial, but three months is too much. Circumstances *in toto,* then, do not at present allow for increasing the frequency of *FAMOUS SCIENCE FICTION.*

Robert Burros writes from Woodside, New York: "Picked up *FAMOUS SCIENCE FICTION* #5 and am glad to see you back in the SF field. I remember when you edited *FUTURE,* and those great western pulps.

"In your editorial, you mention James Blish, whom I remember for the great *Testament of Andros,* published in *FUTURE.* Please reprint *Andros* . . . Was there a sequel?

"How about reprinting those dynamic Alec Coppell novelets about barbaric space empires, which were published in *PLANET STORIES* and *MARVEL STORIES?* They were terrific.

"Do you remember that great *PLANET COMICS,* and that thrilling series by Thornecliff Herrick, *The Lost World?* And *Auro, Lord of Jupiter,* the comic strip series by Dick Charles about a king struggling to regain his rightful Jupiterian throne? How about adapting these to FSF?

"*Thanks* for the Laurence Manning series. Keep publishing the old material. I'll keep buying your book at the newsstand to encourage the

dealer to keep your product on display . . .

"I mostly go for un-intellectual space-opera stuff, adventures on gruesome, strange planets, barbaric empire stuff, action stuff, etc. Humor and satire has its place, but in *MAD* magazine.

"Your book is worth half a buck. You are performing a valuable historical service. Your book brings back memories. (When I read *Andros,* I was 13 years old! I am still 13 at heart, I guess.)

"Never mind the critics! Please publish the stuff the critics pass off simply as 'junk'. That stuff is best. I am capable of reading classics, too, such as Dostoyevski's *Crime and Punishment,* but I don't need critics to guide me to them.

"Your editorials are top notch and so are your answers to readers' letters."

Testament of Andros is readily available in a collection of Blish stories published by Ballantine Books, *So Close To Home.* The story is closer to Dostoyevsky than to *PLANET STORIES,* and it is really stretching the point to call it science fiction at all; I freely confess being aware of this when Jim submitted the mss. to me, and deciding to run it because of its excellence and since the outer format gave the appearance of science fiction. Re-read it as you would Dostoyevsky, and I think you might see that it is entirely complete in itself and that a sequel would be quite impossible.

While I'll admit that back issues of *PLANET STORIES* are not so easy to come by these days, I still

(Turn To Page 119)

Just Published

How 88,648 Heavy Smokers Stopped Smoking

NEW YORK — The Anti-Tobacco Center of America has just published a booklet which explains how 88,648 heavy smokers (of whom many are physicians) have stopped smoking without straining their will power. This booklet is available free of charge to smokers. All you need to do, to obtain it, is to send your name and address to The Anti-Tobacco Center of America, Dept A-95-S 276 Park Avenue South, New York City, 10010. This offer is open while the supply of these booklets lasts.

Did You Miss Our Earlier Issues?

#1, Winter 1966/67: "The Girl in the Golden Atom", Ray Cummings; "The City of Singing Flame", Clark Ashton Smith; "Voice of Atlantis", Laurence Manning; "The Plague", George H. Smith; "The Question", J. Hunter Holly.

#2, Spring 1967: "The Moon Menace", Edmond Hamilton; "Dust", Wallace West; "The White City", David H. Keller, M.D.; "Rimghost", A. Bertram Chandler; "Seeds From Space", Laurence Manning.

#3, Summer 1967: "Beyond the Singing Flame", Clark Ashton Smith; "Disowned", Victor Endersby; "A Single Rose", Jon DeCles; "The Last American", J.A. Mitchell, "The Man Who Awoke", Laurence Manning.

Order From Page 128

MEN OF THE DARK COMET

by FESTUS PRAGNELL

Were the Beings who had invaded our Solar System friendly or hostile? And what did they have to offer a man who was willing to see beyond the parochial limitations of Earthbound humanity?

WHEN THE CREATURES OF THE DARK COMET passed through our Solar System, and in doing so altered the whole destiny of Earth, of Mars, and of every living race in fact, in our little collection of worlds, it was without any intention of producing such a result. They passed us in the course of their almost perpetual peregrinations, like a tangible patch of darkness, found the globe that lights our little corner of the universe unsuitable for their purposes and went on. Their passing was scarcely recorded in any instrument, certainly seen in no telescope, and totally unnoticed by humanity—or would have been unnoticed but for an extraordinary circumstance.

It is probable that where they came from will never be known. The educational methods of our strange, transitory visitors, how they reproduced, and the methods whereby they controlled their numbers—these and many other facts that any student of extra-terrestrialology would give his ears to know, will, it is almost cetain now, never be revealed.

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The name "F. Pragnell" first appeared on the contents pages of science fiction magazines as a collaborator with the then-popular R. F. Starzl, in the November 1932 issue of *WONDER STORIES*, the story being *The Venus Germ*. With this issue the magazine cut down its number of pages, went to saddle-stitching, and reduced the price to 15c. Along with this went a cover design which was nothing more than the dot over letter "I" in the word "Stories" on the cover, magnified, and an editorial on the reproduction of the cover paintings, etc., which really amounts to printing of dots of color so close together that the eye is deceived into seeing a continuous effect, while a magnifying glass reveals discrete single points. The biggest thing on that cover was the "Now 15c". Regular Paul illustration color covers returned with the following issue, and the 15c reduced size magazine had seven issues; with the April 1933 number, *WONDER STORIES* returned to its original number of pages and the price went back to 25c—obviously the price decrease did not persuade enough new buyers to expand circulation to the point where the magazine could do well at the lower price, despite reduced cost.

Two months later, May 1933, the June issue appeared with a novelet by Mr. Pragnell alone, wherein we found out what the "F" stood for—not too common a name, but one which one encounters now and then. Between that time and the time when both *WONDER STORIES* and *AMAZING STORIES* changed hands and general policies, Pragnell would have four more stories, three of them in the Gernsback title, and the best of them a long three-part serial entitled *The Green Man of Graypec*—later to be published in England in hard covers as *The Green Man of Kilsonia*. His one tale in *AMAZING STORIES* during this time, *The Essence of Life*, (August-September 1933, the final large-size issue of that magazine), was reprinted in the pioneer British science fiction magazine, *TALES OF WONDER*, August 1938 issue. At the end of 1938, Pragnell's series of Don Hargreaves adventures would start to appear in the Ziff-Davis *AMAZING STORIES*.

Heathcote? Heathcote was and is an excellent space captain. No doubt he could write an authoritative textbook on the mechanics of interplanetary flight, how to calculate the best, not necessarily the quickest, route from one planet to another (allowing for the motions of both bodies in their orbits and on their axes, and for the pull of the sun *bending* the path of the vessel, how to find one's objective with a magnetic ray, and how to make use of every available planet to help one).

On these and kindred matters his knowledge is so profound that in

almost any emergency he knows what to do without having to stop and think. But question him on anything else, ask his opinion, for example, on the modern tendency for popular governments to lose their power to industrial leaders, or the growing authority of the scientific expert in every field of human endeavor, and he becomes a dull, ignorant man.

It is not surprising that the plant-men, as they have been inaccurately dubbed, found little to interest them in such a man. He must have seemed to them a dumb fellow, void of ideas. We know they tried to interest him in their philosophy, in their sicience, but he totally failed to respond. Heathcote's account of the adventure is a brief, a bald statement of what he saw and what he heard, without any evidence of inquiry into the reason for things.

And Boddington? Felix Boddington, the only other witness of this strange visitation? Boddington has become a wanderer about the Solar System, a frequenter of odd, out-of-the-way corners of neglected planets. He turns up at the daylit ore mines of Ganymede; he has visited the offices of the Jovian Radium Company on Jupiter where gravity is so fierce that a man can hardly move. He has flitted across the scenes at the Biological Experimental Colony on Venus where a few voluntary exiles labor to produce synthetically, living viruses to destroy specific bacteria that attack human beings, food plants, or domestic animals.

Everywhere he arrives without warning, without explanation; wanders around in his aloof, detached way, then, after asking innumerable questions and giving evasive replies to any addressed to him, before one has gotten used to his presence he just disappears.

Something of the spirit of the comet people seems to have entered him. We know that he longed to throw his lot in with them, and only a stern sense of duty called him back to Earth—an Earth he knew to be in grave danger—perhaps regretting his decision. Dissatisfied with mere humanity, he goes from place to place seeking a race, a form of life, a group of people who will remind him however faintly of those delicate beings, now unthinkable distances away, with whom his heart really is.

The comet people found much that was congenial in the spirit of this man. Heathcote says that the two men were seldom together, indeed they had little in common, and that he saw Boddington only at intervals. When he asked where he had been, Boddington merely answered, "Talking to the White Ones", and Heathcote was not the man to press for information.

They must have told Boddington much. It would make any journa-

list's fortune to secure his complete story; but Boddington is seldom in one place long, a most difficult man to get hold of. A young, inexperienced reporter did run across him once, in the Interplanetary Hotel in the middle of the Martian desert; but he made poor use of his wonderful opportunity, and Boddington's annoyance on finding the facts he told a supposed fellow-traveler blazoned about Earth has made the next man's task the more difficult.

However, what the young man, flustered by his amazing luck, found out was sufficient to make his name. Boddington told him the history of the plant-men, and of his own desperate plea for threatened Earth, pleadings that had the result of producing a decision totally opposed to the nature of these beings and contrary to the mental habits of millions of years.

He told how the comet people lived on their distant world for eons, till their sun grew red and weak; how they had left behind all passions and struggle with one another, and lived solely to acquire disinterested knowledge; that their birth-rate was mechanically controlled, so that blindly increasing numbers could never set one against another or their race against another race.

They told how they had seen the approach of another sun that must inevitably collide with theirs; but, having thousands of years in which to prepare, how they had planned accordingly. He told how they had reduced their numbers until the moon of their one planet was capable of holding them all; how they had made this moon into a gigantic space-vessel in itself; and how they had wandered, a race without a home, a world without a fixed abode in the cosmos, seeking a place where they might settle down.

And how, in the couse of their wanderings, they came upon this system of ours is recorded in these pages.

THE COMET REGISTERED ITSELF on the captain's instruments long before he could detect it in his telescopes. According to his entries in the log of the space-vessel the thing puzzled him exceedingly. The ship was halfway on its journey from Ganymede to Earth, and the instruments ranged before Captain Heathcote as he sat in his pilot-room, measured the distance of the various heavenly bodies by means of the gravitational pull they were exerting, and told their approximate mass and the speed at which they were approaching or receding.

Several times the captain went through the calculations that assured him that his position and course were dead accurate according to the

readings of the first three dials, which were trained respectively on the sun, Earth and Mars; he repeated the task because he was conscious of a feeling of uncertainty, a dizzyness, a sort of thickening haze in his mind, and the figures repeatedly produced different results.

His trouble is shown by the increasing shakiness of the writing of his occasional notes, ending in a wild slash; but the idea of sending for assistance does not seem to have occurred to him, for, like all strong-willed men, he refused to admit his weakness but kept grimly on.

The fourth dial showed a body about the size of Earth's moon, a hundred and fifty thousand miles away and approaching at about two miles a second. At that rate, the captain did not need to make any calculations to know it, less than twenty-four hours would suffice to bring his ship and that body alongside. Yet, turn his telescopes in that direction, use any magnification he chose, and he could see nothing of it; even long exposure photography, with plates sensitive both to infra-red light and to X-rays, was emphatic in denying the presence of the mysterious world. Yet it was not between him and the sun but at a wide angle, and should appear as the moon does when it is not quite half full.

The captain yawned and his attention wandered. He thought of his home, of the wife and child he had not seen for two years; he thought of the cargo he was carrying, several hundred tons of daylight ore—the metal far more valuable than gold, one fifth of one percent of which increases the tensile strength of steel thirty times. He thought of the eleven strange beings who, with five Earthmen, manned his ship, unipeds from Mars with oval yellow bodies who for the last ten years had been mining the precious metal on Ganymede, and now, their labors completed, were returning to their native planet by way of Earth to finish their short lives in comparative affluence.

They were docile and easily bullied, and privately Heathcote regretted the many brutalities he had seen inflicted by ignorant overseers, and the long periods of toil they suffered for little reward. Sometimes one wondered what went on in those deepseated brains of theirs . . . He went on to think of something he had resolutely put out of his mind until now, the mysterious fate that had overtaken the last seven ships to set out from Jupiter's moon on errands similar to his own; just when they had reached approximately this stage in their journeys they had "gone dead," and from there on they drifted, sent out no messages, but behaved exactly as though entirely unmanned, until they crashed into some heavenly body and only fragments from which nothing could be learned were ever recovered.

The captain grunted and sat up in his chair. This dreaming would not do; he must concentrate on this danger that threatened his vessel, and make sure, before the attraction became strong, that he would pass whatever it was at a safe distance. Yet, he felt as though a thick blanket muffled his brain . . .

He rubbed his eyes. Before he could work out the best deviation he must clear his head. According to his indicators the oxygen content of the air was correct, and the proportion of carbonic acid gas not too great. Tried as an experiment, extra oxygen brought no relief. A stimulant, that was what he needed; he would send for his Martian servant and demand one of those potent drugs of theirs. He rang the bell that should bring the de-male hopping on his single leg to him. Life on Mars has three sexes, all necessary to reproduction.

The room was unsteady, his instruments showing a tendency to float in front of him. There was something he had to do, something urgent . . . Ah, yes, Ganymede had broken loose from its orbit and was chasing him, a celestial game of tag. What he wanted was a stimulant; he would send for one. But he had done that already. In a gust of temper he smashed his fist down on the bell-push, then laughed, drunkenly at himself.

The room was dark, and the picture of his wife and child in its frame on the wall danced a sort of tango. His eyes closed and his head rolled on his arms.

Captain John Heathcote slept.

Floating in a sort of mist that was somehow filled with vague shapes against which he fought desperately for life, he was conscious of an awful feeling of suffocation, and craved, unavailingly for air, air, air at any cost. And all the while he struggled there was, driving him to further efforts, a sense of an impending catastrophe, a catastrophe far more terrible than death, which he must avert, but knew not how. It was as though some holy mission he was entrusted with was in danger of being lost; but just as he was about to grasp the details, to remember the secret that would make everything clear, solve the mystery of life, it faded away from him . . . For days and weeks, he thought, he struggled thus; then, finding the walls of his control-room clear around him, he tried to collect his faculties, only to sink into the world of dreams again. Racking pains shot through his head. All the while he sank deeper and deeper into a suffocating fog.

He would struggle upwards to full consciousness, then his agony

would multiply, and he would sink back again. In one of these spells he realized that his body floated, weightless, in the air; that showed that the spaceship was no longer answering to the magnetic ray but was drifting. At last he managed to drag himself to the instrument table. His watch had stopped, but he knew without that, that many hours had passed since he had been overpowered. A faint smell as of rotten oranges was in the air; he recognized this and the pains in his head and limbs as the after-effects of poisoning by the Martian drug, *borga*, the narcotic that is the curse of the planet, a small dose of which is fatal to an Earthman.

All that time no one had come near him. The implications of that fact he could not bear to think of just yet, it would have to wait. By a process beyond reason the captain knew what had happened: The Martians had brought a supply of their forbidden drug aboard, and it had broken loose and dispersed itself throughout the ship, killing every occupant but himself. What had nearly finished him must necessarily have slain everyone else; his little, wiry frame had remarkable powers of resisting poison, even the comparatively harmless Earth drugs showed that. Though a temperate man he could drink, and had drunk, without signs of distress, quantities of wines and spirits that rendered habitually heavy drinkers totally incapable.

Besides this there was something else that told Captain Heathcote that he was alone in a ship of the dead; he thought it was instinct, but had any one else been there they would also have known. Not all the messages our senses bring to our brains find their way to the conscious mind; our ears, for instance, bring us many unacknowledged messages. Ordinarily, as the captain sat in his room, a man would cough in a nearby cabin, a step sound in the passage, or paper rustle somewhere. Some of the passengers even slept audibly; but now was silence, a silence to terrify the strongest nerved man.

Staring into the vision plate that showed the view ahead he saw that, uncontrolled, the ship had taken on a steady spinning motion, and the stars, colored points set in velvety blackness, seemed to circle round the vessel. In one place there was a round space that held no stars, a black hole in the sky. For several minutes he stared at this before his poisoned brain found the explanation: That black object must be the menacing body his instrments had warned him of, and its apparent invisibility due to the total absence of light reflected from its surface. Even now it was rushing at him at several miles a second; it seemed strangely unimportant, a trivial matter.

Gradually he was working off the effects of the poison. Possibly there might be, somewhere in the vessel, some person or persons not quite dead who might be revived. Plainly, his duty was to save the ship then make a search and ascertain if this were so.

A ticklish task. The spin of the vessel handicapped him and most of the apparatus refused to respond to his touch. Hours would pass before the magnetic rays would be focused on their distant objectives; that left him only the rocket tubes, whose powers were limited, to work with. But even the tubes seemed to be out of action.

Realizing at last that it was hopeless to attempt to put matters right from the control-room, he hunted out his magnetic shoes, buckled them and stepped out into the corridor. Hardened as he was, he could not resist a shudder at what he saw there: Before him, floating in the air were the bodies of two of his men, one of them sitting on nothing, the other apparently in the act of making a tiger-like spring, the attitudes in which the poison had caught them. Already their faces were marked with the green tinge that would presently cover them from head to foot.

"Is nobody left alive?" he groaned, aloud.

"How do, Cap!"

Turning sharply, he saw a tall, gaunt man regarding him with a faint smile. At once the captain recognized the wasted frame of Fexlix Boddington, the prisoner, who, two years before, had been convicted of ruining his own constitution by indulgence in the Oriental drugs, opium and cocaine. Since he had refused to cease these practices and as medical evidence left no doubt that, allowed to continue them, the man would soon be dead, he had been sentenced to Ganymede, to be detained there for a while. It was hoped he would be unable to obtain the drugs, and that what was in his sytem would have to work itself out.

It chanced that he traveled both ways in the same vessel, the *Aristotle,* of which Heathcote was commander, and the captain remembered Boddington as he saw him when he first boarded the vessel, a man who, in spite of the terrible state of wreck he was in, had obviously once possessed considerable physical and mental powers.

"I must have excitement, captain," Boddington had explained, smiling his little smile that showed no trace of repentance for his crimes. "This monotonous world bores me to death." Heathcote had personally superintended the searching of the prisoner's luggage, and had destroyed several packages cunningly hidden therein; at which Boddington had smiled once more.

To be alone in space with such a man, thought Heathcote, with a

mental groan. Nevertheless he had to admit the other had improved in health and weight, and his sunken, ghostly white cheeks now showed traces of color. Probably, and this was a bitter thought, the very fact that the man's saturated system had become inured to powerful drugs had enabled him to avoid the fate that had overtaken so many better men.

"How do, Boddington!" responded Heathcote, sharply.

The cold, hard tone did not abash the prisoner. "Has a hitch occurred in the chief warden's ordering of my compulsory health vacation?" he enquired.

Heathcote smiled. He would not let this fellow see that the sly attack had annoyed him. "No," he replied, with heavy sarcasm, "the matter has been arranged for your amusement, to give you the excitement you asked for."

"Then it must be written down as a failure," said Boddington; "I am not even interested."

II

NOW HEATHCOTE WAS REALLY ANNOYED and showed it. "Whether the deaths of brave and capable men interest you or not," he said, "you will assist me in endeavoring to save the ship. Your own life depends on it; perhaps in that you will be interested. In spite of the most stringent precautions a supply of *borga* has been smuggled aboard the ship; the poison has spread itself in some way throughout the vessel. Whoever it was, his carelessness has had the most disastrous results. I admit it is probable that one of the Martians was responsible for introducing the poison, but don't forget that you yourself will be under suspicion until the matter is cleared up."

"It is true I have tried this *borga*," admitted the other. "As a substitute for opium it has its merits, but the resulting lethargy is unbearable. If I had not I should not have known of the existence of an antidote, or had any with me to inject myself with when I found the familiar symptoms coming on."

"And you made no effort to save anyone else?"

"Somebody stole my supply three days ago; in fact I had so little left that I was unconscious for quite a while."

Heathcote sighed. The position was bad, and it seemed that he would

have to rely on himself alone; no useful assistance could be looked for from this fellow.

"That," he said, in a tone he tried to make grim, "will be a matter for inquiry when the causes of the accident are investigated—that is, if we ever get back," he added, his weakness suddenly asserting itself.

"Accident," queried the tall man, looking down on him with an air of gentle reproach, "is it possible that a man of your experience should think this an accident? But I forget, you are a sick man; it is wonderful that you are still alive."

"What do you mean?"

"Heathcote, consider the quantity of *borga* there must have been coupled with the fact that my antidote was stolen. Further, how could the poison spread itself so thoroughly through the ship and so quickly. It must have been deliberately introduced into the ventilating machinery."

"That is true. But who would do that and accomplish his own destruction?" For a moment Heathcote wondered if Boddington were the guilty party.

"Come, come, who would you expect to use *borga?* What planet produces it, uses it continually? Have I not told you the Martians have an antidote they can inject into their veins? There are no Martian bodies on the ship; I have been to their quarters, everywhere where they are likely to be found, but not one is to be seen, dead or alive.

"What Earthman ever understood the subtle workings of a Martian mind? I have come nearer to it myself than almost any other man. They work for their ends by devious routes; generations are not too long for them to wait if they see a chance of attaining their objects in the end. Knowing this I have often wondered when the next act in the cosmic drama of Mars' subjection to Earth was due to commence, though I confess I was as surprised as anyone else at this precipitate attack."

"I can't believe it of them, always so docile and willing. Why should they want to destroy this ship? For the sake of the cargo? But even if they transferred the ore to the small emergency sphere, easy enough to do while it is weightless, it would be no use to them: the arrival of every spaceboat on Earth or Mars is reported, its history recorded and its cargo searched. Otherwise, heaven knows what carnivorous plant or deadly insect might not obtain a hold on the inner planets."

Boddington raised his eyebrows. "Really, Heathcote, must I explain every self-evident point to you as though to a child? I grant your silly debating point. The emergency flier is gone, the power-room is an inferno of red-hot metal and escaping power. It would be impossible for the

Martians to land their stolen cargo secretly on Mars unless they had the assistance of the native authorities. Tell me, what is daylight ore used for?"

"Ultra-steel is made with it for bridges, roads, and such-like."

"Anything else? What are we in now?"

"Also for airplanes and spaceships, of course."

"I think we may say the ore is used mainly for spaceships. How many loads have so far been actually landed on Earth?"

"No full loads, and only four small ones."

"And how many have gone astray, as we have gone astray?"

"At least seven besides ourselves."

"Well, those are the facts. Do they suggest any conclusion to you?"

The space captain did not answer. His brain was vibrating to the one word, "War," so loudly that it seemed the dead men and the escaping pirates must both hear. The only conceivable object of obtaining such large supplies of daylit ore secretly was the construction of a huge space fleet, a fleet against which Earth, with her handful of vessels, would be helpless. It was utter extinction in a sudden attack that faced humanity; then Mars, her servitude over, would rule the planets.

"And we can do nothing to warn people," he murmured, barely audible, at last.

"That so," drawled Boddington, raising thin eyebrows beneath which his eyes seemed to have sunk into his head. "I take it we are drifting towards Earth, and that when we are near enough some ship will be sent to rescue us."

Heathcote gasped. He had been made to feel a fool, but the ignorance of space-navigation now revealed restored his self-esteem. This simple optimism struck him as being irresistibly funny; he smiled, a smile that grew into wild, hysterical laughter. With studied patience, Boddington waited.

"Our present direction," explained Heathcote, at last, "will not bring us within ten million miles of Earth, for we left the plane of the planets in order to pass over the asteroidal belt. If, as you say, the power machinery is wrecked we have no means of producing this magnetic ray which alone will bring us back to safety, or of informing anybody of our plight; unaided, the rocket tubes are capable of little more than ensuring a safe landing when a planet is reached. Besides, we are at this moment, I had forgotten it, rushing headlong into collision with a body that can only be a comet. Look!"

The spinning motion of the ship, probably due to the escaping power,

had perceptibly increased; the sun and the distant stars, among which Mars was greatly conspicuous, appeared to be whirling round them at a speed to make one dizzy. Boddington now understood why they had drifted while they talked to one of the walls of the passage. He tried standing on the wall and found it a success. But he could see no comet.

"See there," explained Heathcote, "a round space where there are no stars: that is it. It absorbs all the light that falls on it, so that it can only be picked out by the hiding bodies behind it."

Difficult indeed was it to believe that that sphere was matter and not absolute nothingness, a hole in space: it looked more like the blackness of ultimate Nirvana whirling round them, the end of all things, a place where nothing existed.

With a curt direction Heathcote led the way to the steering-room where the rockets could be operated by hand when necessary; on the way a quick glance showed that the power-rooms were unapproachable, and a horrible smell of burning flesh came to their nostrils.

Trying the levers and switches, the captain found everything apparently in order. "Must correct this spin first," he muttered.

Boddington, unprepared, staggered at the sudden application of force. The stars circled more slowly, the comet seeming like a black panther creeping stealthily round and preparing for a spring.

Boddington staggered to the left and assumed, correctly, that their nose had been turned to the right. He had time to wonder whether this would result in their turning end over end like a boomerang, then he thought that the comet itself stretched out a great hand and arm and pushed them away. He crashed onto the ceiling, which was now the floor. Getting up he called to Heathcote, seated in the swivel-chair with feet above his head, "Why decrease our speed, Cap?"

"So as to be caught by its gravity and find an orbit round it."

"Why? I've already seen all I want to of it."

"Fool," Heathcote called down to him in his deep voice, "don't you find the place already getting uncomfortably hot? In twelve more hours parts of the vessel will be incandescent, and if the rocket fuel does not explode the envelope will burst anyway, and our air escape into space. A landing on the Dark Comet is our only hope."

"Cheerful prospect," returned Boddington.

They traveled in an elliptical path round the Dark Comet, being about ten miles above it at the nearest point. Even so close as that, they could see nothing of its surface, but seemed to be looking down a bottomless well in space; this in spite of the fact that they were on the sunward side

and not in the pitch darkness that enveloped them when in the shadow of the comet. There was an illusory feeling that it radiated intense cold as well as darkness, though here and there were glowing spots of red.

As Heathcote cut down the speed they sank closer; there was no atmosphere, so that atmosphere braking could not be used, and they had to rely entirely upon rockets. At last they touched the surface in their passage; there was a rending sound as the tearing of a sheet of tinned iron, and the compartment was momentarily bathed in bright red light. It happened again; wherever they touched appeared a blazing red spot.

"I'm going to land," called Heathcote, applying all his braking power. The heavens wheeled drunkenly, and the rush of blood in Boddington's head gave him a violent feeling of nausea.

They dropped like a stone until Heathcote discharged rockets downwards to check the fall. Where the blasts struck, the surface at once burst into fire; then they saw that it was simply a long crack that had formed, through which the red light glowed. A transverse crack appeared, at right angles to the first; they seemed to be plunging straight into flames: then they touched again; again that sound as of tearing tin—they had broken through.

It was a change as sudden and complete as though they passed from one dimension to another, or as if they had gone from a region of snow and ice to a warm, well-lighted room. Space was bathed in red light, and they knew, without testing it, that it was also charged with radiant heat. Below was air in which floated little fleecy clouds; while above, the inner surface of the envelope through which they had plunged, formed so perfect a mirror that it reflected the scene below, far above their heads. Some details that were vague when one looked down became clear when one looked up.

"Captain," observed Boddington, "your efforts to amuse me are becoming more successful; I am mildly interested."

A gust of regret filled Heathcote that this fellow should be his sole companion, and not some understandable member of his crew. As he thought of them, straightforward and willing, without the perplexing subtleties of this man he was saddled with, a momentary impulse to murder flashed through his brain.

Steadily the vessel dropped towards an area of black water, dipped below, then came up and floated. With the deafening crackling of the redhot metal came clouds of steam that obscured everything from view, so that it was many minutes before they were able to see clearly.

"We are lucky," said Heathcote, after making tests, "the air here is thin but the oxygen content is O. K, and there is nothing harmful in it."

Without reply Boddington opened a door and went out onto the outside encircling platform. Momentarily annoyed that he had not asked permission to leave the ship, Heathcote followed and went the other way. He saw that the vessel rocked on a gentle swell, and felt a fresh breeze strike his face. Using his pocket compass he found that the wind blew from the east, for this world, which could not have any geographical variations of climate, yet had a North Pole to which the magnetic needle readily responded.

Then he took out the intricate little mechanism that all space navigators carry which shows the direction and approximate distance of the sun. His reading showed that they were leaving the Solar System at such a startling rate that he concluded the instrument had gone wrong.

How could there be winds here, seeing that there was no external source of heat to cause them? High above sailed an egg-shaped pink object, having seen one of which he began to pick out others. They might be birds, or some new form of flying life, or then again they might be ships.

With a grunt he gave it up and went inside. From a crack somewhere in the envelope water trickled in. Awakening to the danger of this, he started an atomic blast to send the ship onto a sandy beach a few miles off, careless of whether he was causing Boddington to fall off and get a soaking. He managed neatly, a downward blast at the last moment lifting her so that she came to rest with her fore parts clear of the water and power-rooms in sufficient depth to ensure that they would not heat up dangerously again.

For a while he examined the machinery to see what chance there was of effecting repairs, but most of it was still to hot to handle. Then he became uneasy about Boddington. A rapid search did not reveal him; probably he had gone exploring, again without permission; or perhaps he was having a good feed somewhere, or looking for more *borga* or opium.

That reminded Heathcote that he was hungry, and he got himself a good meal. An unaccountable feeling that he was being watched by many eyes was growing on him; once, convinced that someone or something was between him and the door, he swung around suddenly and said, "Hello."

Once he jumped up and walked to the window, but the landscape was bare except that it was dotted with low mounds he had not noticed before,

which, by reason of their exact roundness, he thought must be either plants or the structures of living things such as ants.

Making an effort, he went on with his meal. The air was growing misty, and through a thick fog that that had sprung up outside and was drifting in the honest white light of his own lamp, which he had working again, shone murkily. Although he shut out all air but that coming directly from the ventilators the fog still grew thicker. Perhaps it was some chemical effect due to the meeting of Earthly air with that of this place. Unreasonably, treacherously, his light went abruptly out, leaving him in a pale red gloom. He heard a squeak that he knew was from some creature not of Earth, then complete, unexplained blackness enveloped everything.

III

HE WAS CONSCIOUS OF BEING LIFTED, carried, of being unable to resist. Then for a while he knew nothing.

"This is getting monotonous."

It was Boddington's voice in the darkness, Boddington expressing his reactions on finding himself drugged into insensibility for the second time in little over a day. Boddington was right; it was getting monotonous. Heathcote found himself lying on something soft in a place that was perfectly dark and silent.

He sat up, and instantly a white light, dazzling at first, snapped into being. He lay on a heap of brown, feathery material in a circular, domed room that seemed to be the interior of one of the mounds he had seen: it was about twenty feet across. The tall figure of Boddington lay on another such pile not far away. The wall was mainly red, but other colors were splashed about it in haphazard streaks and spots; it jarred on his sense of orderliness, but it did not occur to him that it might have been done by creatures able to see only red and infra-red light, and consequently blind to the imperfections of the wall.

Between the two men what Heathcote took for an ornamental plant grew out of half a red ball that stood, flat side uppermost, on the floor. It was of the dead white of bleached bones, and rather at first glance like a tree, five foot tall and without leaves. Two branches, growing near the base of the trunk, ended in suction pads ringed with hooks; higher up two more branches divided and sub-divided until they became thousands of minute points; while the only other branches were three

short ones at the top that looked to Heathcote as though they had been severed, leaving raw round ends of pink flesh.

"Morning, Cap," exclaimed Boddington, cheerfully, "what do you think of our host?"

"Host?" returned Heathcote, "I see nothing."

"Right in front of you, on the red hemisphere."

"That? That's only a plant."

"No, it's a form of animal life; it keeps moving, every tendril quivers, and those short limbs are eyes; it keeps turning them from me to you."

Looking more closely at the white plant, Heathcote saw that it was true: Every limb of the stange plant, or creature, was in constant motion. As he watched, the bowl moved; he thought it had overbalanced, but it glided up to him and seemed watching him intently. His curiosity aroused, he decided to examine it, but when he rose it glided away.

Hearing Boddington chuckle, and becoming suddenly, in some queer way, afraid of this thing, he strove to hide his feelings in a burst of temper; but it easily avoided his hasty efforts to catch it, and sliding rapidly along, always upright, shot through an opening where a section of the wall rolled up like a parchment to let it out. When Heathcote reached the spot the wall was as solid as a rock to his hands and feet. It was immovable.

On the way he nearly fell over a number of objects in the center of the room. There was a square table hanging by whitish cords from the ceiling, and two chairs, obviously brought from the *Aristotle.* On the table was Heathcote's interrupted meal, exactly as he had left it, except that it was cold; while another table bore a similar selection of foodstuffs from the ship's store. Seeing the refreshments Boddington sat down and began, in a perfectly natural manner, to eat and drink; Heathcote, after some hesitation, joined him, and fed himself with as much dignity as possible in view of the fact that the other had taken possession of the only available knife and fork.

"What do you think of our hosts now?" queried Boddington, still cheerful..

"Must be a low form of life," growled the other, "No brain so far as I can see."

"On the contrary, I consider them a very high form of life. Why must you conclude, because our brains are concentrated in one spot, every intelligent being must be the same? Could not an equally efficient mind be associated with several smaller brains, or even with gray matter, or something akin to it, distributed throughout the body?

"Hands are more fundamental than brains. Without hands our brains would be of little use. I ascribe the rise of humanity as much to the development and use of limbs efficient at handling things as to the increasing size of the brain. How can you look at the wonderful handling mechanism of that creature, those hundreds of fine fibers and suckers, with those two lower limbs for use when force is required, without realizing that they must be capable of a thousand delicate operations our clumsy fingers could never accomplish?"

"Maybe," answered Heathcote, rather out of his depth. As he spoke he saw that the object of their discussion had returned, and he jumped up to pursue it again.

"Let the thing alone," barked Boddington, "can't you see it may be useful to us? Chasing it away whenever it appears. Let me see if I can talk to it."

Taking his plate, knife and fork from the table, he waved them in the air before the plant making several gestures. It seemed to consider, then turned and went away.

"See," he said, "it understands; I indicated that we wanted more knives and plates and forks and it has gone to fetch them."

"Hmph," grunted Heathcote incredulously, "if you think that thing knows what you meant you're mistaken." But he had to admit himself wrong a few minutes later, when the plant glided in again, carrying the required implements in its delicate tendrils.

"Not bad, eh? We're making progress. What can we tell him next?"

But it was the plant itself that took the next steps in communication; it glided up to them, then away, as though asking them to follow. When Boddington did so it led him to a round black pillar near the wall, in the side of which pillar was a handle which the plant, apparently demonstrating how it worked, pulled out and pushed in again; trying it himself he found the top of the pillar grow radiant with heat which increased as he pulled the handle further out.

The purpose of it was shown by several frying-pans, saucepans and kettles from the *Aristotle* which lay near on the floor; the comet people had provided them with cooking facilities. Going on, the plant showed him simple but common-sense sanitary arrangements, and two pipes, one of which gave forth a soapy fluid and the other drinking-water when squeezed. He tried washing his hands and face and found it a success; there was no towel but the plant showed him how to switch on a radiant heat that dried him in a few seconds.

Encouraged by success, Boddington made further experiments. Wet-

ting one finger, he drew the outline of a tea-pot on the wall. The plant looked, considered, and went, to return shortly carrying two of the articles indicated together with a pointed metal stick and a blackboard.

"Pencil and paper," thought Boddington, grasping them eagerly but he could make no mark on the smooth surface. The plant had a little difficulty in showing him how to start the current that left glowing red marks where the board was touched; the application of heat wiped it clean again. Thereafter interplanetary communication proceeded on more satisfactory lines.

For several days the two men found all their needs attended to except those of exercise and intellectual companionship. Well-meant efforts at conversation served only to point out their differences, to establish their lack of a common field of interest, and both became bitter and taciturn. Time hung heavily, for the difficulties of explaining to the plant-animals (they could soon distinguish individuals) that they needed a pack of cards or a chess board proved insurmountable. Boddington did succeed in obtaining a razor, and kept himself neat and tidy; Heathcote, with a vague idea of being different, began to cultivate a beard.

As far as possible they kept apart, rather like the two men in the Bab Ballad who, shipwrecked on an uninhabited island, would not not speak because they had not been introduced. Each endeavored to sleep while the other was awake. After an indefinite period of this boorishness three of the plants slid in together and succeeded in conveying to them that something important was about to happen.

Presently there entered two more of their kind pushing before them two chairs that had been mounted on red hemispheres similar to their own. This queer mingling of earthly and unearthly objects was the first indication that the hemispheres were not part of the plants, but merely means of locomotion. On the backs of the chairs was what looked like a twentieth-century radio set, bearing a mass of wires shaped to fit over a man's head, on the inner side of which shone a myriad points of naked metal.

Perceiving that the creatures wished him to sit on one of the chairs, Boddington, philosophically accepting his helplessness, did so, and felt the cap placed over his head. Heathcote hung back viewing everything with suspicion.

Probably thinking he did not understand, two of them took hold of his legs in their lower limbs to lead him to it. Indignantly, he wrenched his feet away. It was Heathcote's second attempt to use force on the Dark Comet, and it was no more successful than the first; his wrists and ankles

were promptly seized by four of them. His legs swept from under him, he fell on his back. He fell heavily, shaken, but the soft floor and the light gravity prevented him from being really hurt. It was Boddington's smile that annoyed him most.

Now it is possible to tell part of the story as Boddington saw it, thanks to the young reporter who got the details from him: It is even possible to use Boddington's own words, except that the young man may possibly have embellished them a trifle in his own professional interests.

FOR SOME TIME, SAYS BODDINGTON, I had been conscious of the efforts of these beings to get into closer touch with me. I felt a dumb, as yet expressionless, but powerful striving of an alien intellect seeking, in spite of absymal differences in methods of thought, in the chemical bases of life, in spite, even, of a different set of senses, to find some common ground with my own. The feeling invaded my waking hours, disturbed my sleep, as though determined efforts were being made to reach me by telepathy.

The effort failed because my mind could only conceive ideas that were familiar, and the thoughts that were being conveyed to me were those of an alien world. There was an insistence on colors; the plant creatures seem to see seven primary colors, but they are to us either red or invisible infra-red rays, and their color sensations are totally different from ours.

These thought waves, and they were strong enough to fill my mind with a sense of uneasiness, of frustration, succeeded in conveying only one concrete idea to me; that there were beautiful, instructive pictures on the walls of our cell. But when I looked I could see only a red surface badly disfigured with yellow.

Had it been left to Heathcote we should never have become *en rapport* with these beings; we should have gone on hurtling away from our planetary system, dumb prisoners, studied as zoological specimens are studied. Men like Heathcoate, I suppose, are neccessary, but they make poor company, and they are useless in a situation like this one. It was soon obvious that I should have to depend entirely on myself: no useful assistance could be expected from this fellow.

I blinked to myself in the red light again. There is much monotony about a landscape bathed in an entirely red light, and after a time it is very fatiguing to the eyes. One closes them and sees it all again in blue and violet. Yet, to our guides it was a beautiful world with all the shadings and blendings that must result with no fewer than seven

primary colors. After all, colors are merely an invention of the brain; they do not exist apart from the eye that beholds them.

The mounds were irregularly scattered about; there was none of that geometry of design and planning that makes human buildings so painful to the eye. That mania for straight lines and right angles was non-existent here. Bulbous vegetation, jet black to my alien eyes, grew here and there, and our guides carefully avoided it. On tall, wavy, tapering stems pear-shaped lamps gave forth red radiance; there were dark hills in the distance, and fleecy red clouds in the sky.

We slid on, through the mounds which I saw were habitations, uphill and down, always at the same unhurried pace, and noiseless save for a certain dry sliding sound and the occasional crunching of some small object like a sea-shell. Passing through the mound-like houses, we came upon an expanse of rows, straight lines at last, of vegetation similar to that which decorated the town, except that it was smaller, more hairy and hardy-looking. These, I realized must be cultivated fields used for food production. Besides the ordinary red lamps there now appeared many more of different design and dark; probably producing mitogenetic rays for the promotion of growth.

Farther on the cultivated plants became bigger, then we came upon an oval red object, twenty feet long, that rolled along the rows, cutting off every plant near the ground and throwing it into a huge basket at its back. This work was perfomed by a sinuous red arm that divided into hundreds of branches, each seemingly endowed with intelligent life, that grew out of the front of the machine. How it remained in front, instead of being rolled on in the passage of the sausage-shaped object, I was not close enough to see. As the machine passed it sprayed the ground behind with what I guessed to be a fertilizing fluid.

A pink moss had sprung up on the cleared ground, covering the space between the severed stumps. Farther on the stumps began to sprout again, smothering the moss out of existence; while, less than a mile away, another machine was cutting them to the ground again. Suddenly I realized the amazing speed at which the whole process was being carried on. Where the machine had been a moment before the soil was hidden under a pink carpet; watching one stump I actually saw a fresh shoot appear and grow several inches.

My brain reeled as I tried to calculate how many of these beings in whose hands we were could be supported by this one farm, which stretched from horizon to horizon in bands of about half a mile. Surely little nourishment was needed to feed one of these flimsy beings.

After traveling several more miles we came upon a smooth, glassy road leading into the hills. Entering a long ravine, lit only by lamps at wide intervals at the bottom, and by the diffused radiance from that mirror a hundred miles above our heads, we saw flying creatures flutter past, but so fatigued were my eyes that I could not determine their shapes.

"Red, red," I heard Heathcote groan, "if I don't soon see some other color I shall go blind or mad."

Again I felt that sense of questing in my mind, that uneasy feeling of searching, of grasping at something intangible. It was stronger than before, and accompanied by a feeling of nearing success, as though something sought were almost within reach, and would soon be attained. Instinctively, against my reason, I resisted; it was like trying to keep the telepathic fingers of an alien mind out of the innermost sanctuaries of my brain.

I felt that, once let this foreign thought penetrate to mine and all my most secret self would be known, all my personal desires and wishes, hidden memories of by-gone wrongful acts, thoughts and ideas I would not admit even to myself would be exposed. We are all prudes, with minds full of inhibitions and complexes. Nevertheless I knew my resistance would avail nothing.

An order rang out, a telepathic command, "Halt!" so clear that I was not in the least surprised when the whole procession came to a sudden stop. Then there were further commands whose meaning eluded me.

Thinking to stretch my legs I tried to jump down from the chair. But my apparent freedom proved illusive; I could not do so. Two of the comet-men approached, carrying a black object like a sausage wrapped in a handerchief. "I am to be blindfolded," I thought, and so it proved, for they clapped this over my eyes.

Opening my eyes, I found them inclosed in a sort of box containing a brightly colored kaleidosopic picture. Before me was a landscape bathed in sunlight assisted by occasional white lamps; to right and left the ground sloped sharply upwards, being covered with rich green grass among which grew flowers similar to pansies, tulips, crocuses and big cowslips, as well as a varied confusion of shrubs.

The sky above was a clear blue with no sign of clouds; while, in the foreground on the picture was a group of plant-creatures different from any I had seen. The hemispheres on which they were mounted were of different shades, one yellow, one orange, one purple, one violet, and on them were pictures of short-winged, long-legged birds and of beautiful

We reached the end of the defile, entering upon a wide space. Near the entrance a number of the plant-creatures stood and tended amazingly complicated keyboards.

things rather like butterflies. The comet-creatures themselves were beautiful in violet, red, blue and yellow, these shades continually varying, moving rhythmically up from their bases. I marvelled greatly at the perfection of the picture, especially as the plant-beings were all moving, and birds and insects similar to those shown on their strange vehicles fluttered about them. It was, I realized, an attempt to show me what their world would look like in a white light.

IV

TURNING MY HEAD, I SAW HEATHCOTE beside me, staring at me in astonishment. His clothes were soot-black; he wore green binoculars, and his skin was as white as a clean shirt, a veritable man of chalk. The amazing explanation of this occurred to me suddenly; I was looking not at a picture enclosed in a box but at the actual scene before me.

In some strange manner the substance through which I was looking shortened the light-waves, bringing the normally invisible infra-red rays within the narrow limits of our visible spectrum; so that we were seeing this world more nearly as the inhabitants saw it, except that we could never know how these sights were actually recorded in their brains.

This was a beautiful world, more beautiful than any spot I had known on Earth, yet the limitations of our senses had blinded us to the fact. I wondered what we would find, supposing our ears and noses were similarly attuned. Delightful perfumes, ethereal music, I am sure, would have greeted our educated senses. And I might have reached that stage, have become part of a world of ultimate perfection, where every animate or inanimate thing had been made to minister to the dominant beings, to provide delights for the senses, and where was no pain or trouble, nothing but the steady acquirement of knowledge and then enjoyment of beauty more keen than the transient delights of any drug.

But I cast aside the opportunity, turned my back on this world and its gentle inhabitants, to save a planet of my fellow men, who treated me as a felon because I sought beauty in a way they did not approve, who sent me to exile because of the way I treated my own body.

But I digress. We still had some distance to go on those gliding half-balls, the bottoms of which were so perfectly smooth that the road might have been thickly coated with oil; and it was with deep regret that I realized that our journey was done as we reached the end of the defile, entering upon a wide space with a smooth, glassy floor. Near the

entrance a number of the plant-creatures stood beside their hemispheres and tended amazingly complicated keyboards, every one of their hundreds of fine tendrils plugging in and unplugging, making and breaking connections, moving tiny wheels, handles and levers.

I realized the bewildering intricacy of machinery made and operated by beings specially evolved for its use. It filled me with revulsion for the clumsy mechanisms of Earth, where man surrounds himself with ugliness.

We slid on into the center of the space, where our guides reached out their strong lower limbs and dropped to the ground. Our chairs, with us still unable to leave them, were taken off and stood on the floor. On a flat yellow stone before us three of the plant-creatures stood with their many fingers interwined in the wires of an intricate machine.

Thus we sat while they stood and waited. There was no movement save for things that occasionally flew past, others that, never in a hurry, walked amongst us, and the incessant vibration of the tendrils that were the fingers of our captors. There was no sound save the flap of tiny wings or the soft pad of little feet.

Peculiar sensations assailed me. I felt my legs grow burning hot, then cold; but when I looked there was nothing there. There was a sweet taste in my mouth, followed by a sharp one. I heard a series of musical notes, traversing the whole range of hearing; I smelled peculiar smells and saw various lights.

All these sensations had their origin in impulses from the cap over my head affecting my nerves, and I realized that my senses were being experimented with to determine how I responded to different stimuli. Suddenly I felt as though a red-hot needle were plunged into my spinal column; the muscles of my arms contracted violently. There was a vague stir, and I had a distinct impression that these beings were apologizing because the impulse had been accidentally made too strong.

A soft, low voice said, "It is done. We can talk to you." The voice was not in my ears but in my brain.

I was not surprised. So long had I felt those voices in my brain, trying to express themselves, that when at last they became articulate it was as a thing long expected and waited for. I knew I had but to think my answer and it would be understood; but I remained passive, awaiting more.

Heathcote spoke, aloud. He demanded that we be returned to our own ship and sent back to our own planet. At once a flood of answering reason poured into my mind, arguing, pleading. We were welcome on

this comet, where not only would no harm come to us, but every arrangement would be made for our comfort; this was the place of happiness. Heathcote would have none of it; all he wanted was to get back to his own people, and I must come with him. His speech became so rapid that they protested they could not follow.

I interrupted the argument, speaking aloud so that Heathcote might hear. I had no desire to accompany my compatriot, but would be delighted to accept the hospitality of the people of the comet. That brought his wrath on my own head; he cursed me, abused me, reminding me of what in truth I had forgotten, the danger that threatened our people at home.

"We must consider this matter, and sleep and rest before we decide," I told them.

"What is this sleep?" they asked, their attention now wholly on me. I explained our days and nights, and how we were active during the day and slept during the night. Their world, they said, was always light, and having no neccessity for periods of violent activity to be compensated for by periods of recuperation, they were always tranquilly conscious. Haste was an unknown thing on the Dark Comet.

Nothing more passed between us. We were lifted back on the flat surfaces of the hemispheres, the guards remounted, and away we went, through the plantations of swiftly growing plants, now a riot of brilliant hues, past the harvesting machines that rolled over the fields but never became soiled, to the low mound that was our home, or prison, on this world. Our guards took the light transformers away.

Heathcote began at once to talk about the urgent need of getting back to Earth. His insistence irritated me, for I wished to dream about the plant-beings, and all I might learn about them when our method of communication, at present crude and requiring concentration, was perfected.

"How do you propose to get back?" I asked wearily.

"Our ship can be repaired and we can run it between us. If I show them how it works these beings can put it right in no time."

I realized that the man had energy of a sort that often gets its own way. "How far away are we now?" I queried.

He glanced at the watch-like instrument on his wrist. Using the shortest known rays of the sun, harder, that is, more penetrating, than even the gamma rays of radium, it always indicated the distance of that body.

"The thing is broken," he said; "either that or we are more than a light-year distant. Which is impossible."

Is anything impossible? For my part I had seen so many impossible things since I had arrived on this world that I would hesitate to describe anything thus. Admittedly, Earth scientists tell us that it is impossible to travel faster than light, but I also know that scientific ideas change. Who, at one time, would have credited that the wave motion theory of light would ever be seriously challenged?

Stretching myself on a heap of down I went to sleep; for it is my practice, when faced with an awkward dilemma, to sleep on it, and I usually wake up with my mind made up. But I could not sleep soundly; after a while I opened my eyes to see Heathcote sitting on his own bed, his hands on his knees, watching me grimly.

"Well?"

"It is clearly foolish for us to think of getting back," I declared; "therefore I propose to remain contentedly here, where at least we are comfortable."

"Haven't you thought of our helpless, unwarned cities falling before the unexpected attacks of the Martians? My own dear wife and child—surely there is someone you hold dear, helpless before the heat rays of the invaders; ruin and death stalking Earth."

Heat rays, yes. Rays a little longer than those that seemed to us, with the transformers on, as visible light, produced in such power that they caused anything combustible to burst into flame. There would be short rays also, known to the people of old as X-rays and radium rays, that would peer through buildings and shelters seeking out living flesh. People touched by them might seem unharmed, might even be unaware of it, but they would be doomed to an agonizing death within a few hours.

And disease germs. Maybe the Martians had developed human forms of some of the scourges of hot, moisture-laden Venus, against which nature has provided our bodies with no means of defense. It would all come as a surprise, dozens of huge, well-nigh impregnable space-ships suddenly appearing to attack a world that had not dreamed of the possibility of their existence, and whose defenses were woefully inadequate.

"I doubt," I observed, "whether two solitary men could affect the issue in any way. Things will work themselves out; we cannot alter the issue even if we succeed in getting back safely."

"Then you refuse to aid me? Don't think I want you. I'd go alone if I thought I could run the ship single-handed."

"It would be useless."

"Then I declare you a traitor to the human race, a renegade, a coward."

"Heathcote, take those words back. I allow no one to speak to me like that!"

"To hell with you, you miserable skunk!" He rushed at me, breathing hard, and I was forced to adopt a defensive attitude. He was a wiry little fellow of about ten stone, while I was something over twelve, and stood six foot three. Even in my rage, I am slow to anger; I hated the idea of using my superior weight and reach to overcome him, but he gave me no option.

He came at me, feinting and moving his arms very quickly. He was a useful fighter for his size, but I was much handier with my fists than he probably imagined. His speed beat me, I had no idea which way the blow was coming; as the only thing to do I struck out with my left. My superior reach found him, knocking him on his back.

Absolutely undismayed, he was up again in an instant, attacking with fury. Somehow getting past my left lead he got home several rapid blows, one in particular on my solar plexus causing considerable distress through stomach muscles not so iron hard as they once had been. Breaking away, I knocked him down again. Thus we continued, my long left (the knuckles were soon raw and bleeding) usually kept him out; but when he got past it he scored freely. The fighting spirit of my boyhood days coming back to me, I fought with the one idea of knocking him out.

The end came suddenly. He had stumbled over my couch, and, not wishing to take advantage of him, I stepped back. As I did so I found myself firmly held, unable to move. A number of the plant creatures were behind me, holding my arms and legs with the suckers at the ends of those strong lower limbs of theirs. It was useless to attempt to break away from them.

Heathcote was similarly held. Catching my eye he laughed ruefully, wiping blood from his face. I was in a pretty bad way myself, with a beautiful growing specimen of a black eye; of the blow that caused it I had no recollection. While my body was battered and sore his head had been my easiest mark, so that he looked much the worse.

If the plant creatures felt any surprise at our activities they had no means of showing it. The two chairs with the machines on them were there; and they promptly put us on them, clapped the transformers over our eyes and started out. Their handling seemed rather rough, probably because they did not realize our bruises hurt.

This time we did not travel so far as on the previous occasion, but entered a large mound nearby. As I afterwards learned, grave doubts had been expressed as to the efficacy of the machines for producing and recording thoughts in our minds, and our visit to the open laboratory in the hills had been for the purpose of testing them.

Now that their efficiency was proved they had been brought near so that the study of living humanity might proceed with all possible despatch, every minutest detail of the physical structures of our bodies being already known from the examination of the dead men found on the *Aristotle.*

It must have been the weirdest experience that ever fell to the lot of a human being: to be seized by things more like the white branching corals one sees under glass in museums than anything else I can think of; to be hoisted by them onto precariously perched chairs that seemed as if they *must* fall over; to glide with no visible means of propulsion into the open, out into a world where everything was red or black; to have something clapped over one's eyes and see this scene take on a myriad brilliant hues; to enter a round building and to find comprehensible ideas forming in one's mind, as though level, expressionless voices were talking to one.

The wonder of it prevented me from grasping quickly what they tried to convey. Our progress was very slow compared to what we afterwards attained when both they and I became more proficient in the use of the machines. I found that I thought, mainly, in words and pictures. When I made mental use, for instance, of the word, "electricity", I formed the pictures of a lightning flash, a light bulb, and an atom with one planetary electron leaving its orbit; and it was these pictures that the waiting intelligences perceived. There was much delay owing to definitions being repeatedly called for, for instance, I had to explain "light" as visible electro-magnetic rays.

Heathcote proved a poor subject. When they failed to understand him at the first attempt he would not take the trouble to think it again more carefully, but became annoyed. It was well for him that they were surely the most patient creatures that ever existed.

I was considerably amused to catch their repeated remonstrances: "It is not we that are slow of understand. It is you that are impatient." Indeed, almost the only message he had for our hosts was the rather uncomplimentary one that he wished to leave them at the earliest possible moment. After their first abortive attempts to understand him they gave him up, and concentrated on me alone.

It was not for several days that my conversations with the comet people reached a stage that could be described as fluent. Most of our earlier efforts were spent in experimenting, in finding a common ground of understanding, and in the simple exchange of ideas, instead of attempting to combine those ideas into thoughts. By degrees I learned that my interlocutor possessed a name that sounded to me like Pahlo, and described himself as a "seeker after exact knowledge", as we should say, a scientist.

I described to him our lives on our home planet, and he in his turn described the history and ways of the people of the comet. The Dark Comet had once been a satellite of a planet in an unthinkably distant system, but, a catastrophe overtaking their sun, they had crowded onto the satellite and set it wandering through the universe. He tried to tell me the method by which the world was directed in its wanderings, but my brain was incapable of grasping the explanation.

I did, however, succeed in obtaining a fair idea of how the warmth of their world was maintained during the passage through the enormous empty spaces that separate sun from sun: The colossal envelope that had been the first we saw of this world and through which we had so startlingly plunged, was constructed so that its outer surface allowed every particle of energy (he insisted in talking of particles, and not waves of energy) that fell upon it to pass through reflecting nothing, while the inner surface was a perfect mirror that reflected back everything radiated from the ground below.

"Then the stars should be visible through it," I said, after thinking this over.

"They would be," he responded, "but for the diffused light reflected downwards."

Some time after this I asked him whether there was any way in which it would be possible for us to be returned to our homes.

"I had not thought of it, but probably it could be done. Do you wish to go? Your ship alone could not do it, but if we added improvements it might succeed."

That set my brain in a whirl. So certain had I been that we would never be able to get back that I had not seriously considered Heathcote's demand that we set out to warn Earth of its danger, to interfere in a struggle we had left far behind, a struggle tht had its origin in the injustices caused in previous generations. I could no longer shirk the problem: Should I remain here, or should I attempt that journey through

breathtaking distances back to our home, maybe spending most of our lives on the journey, and arriving spent old men, to find ourselves the only human beings alive? If we were able to deliver our warning, of what use would it be? Generations would be required for Earth to construct defenses that would give her any chance of avoiding extermination, even were she able to capture the mines of Ganymede, and what a hope, that! The comet was heaven to me: I understood these beings, and I felt I should soon become one of them.

"But my colleague says we are more than a light-year from the sun," I objected.

There was a slight delay while he calculated how far an electromagnetic ray would travel in the time it takes for planet number three in the system they had just left to make a complete circuit of its parent body. "We are more than two light-years from your sun," he declared.

"How can that be," I asked, "when our scientists assure us that the speed of light is the ultimate limiting speed of the universe?"

"That is because your scientists have nothing but that clumsy medium, light, to work with. You have but five senses, and with these you try to understand everything. It cannot be done; it is like trying to build a house with nothing but bricks, no mortar, no cement, no timber, tiles or glass. Your house would be blown down by the first strong wind.

"Your five senses, too, are extremely limited. You see only a narrow band of the spectrum; you hear little; as for touch your fingers are ridiculously crude, while smell and taste are practically useless scientifically. Imagine yourself on Earth watching us through a telescope; we would appear to be leaving you at a speed much less than that of light."

I thought this over and saw that it was so. Each succeeding ray of light from the comet, supposing the comet gave forth any light, would take longer to reach an observer, having further to go; and thus the apparent speed of the comet could never exceed that of light.

"Then," I said, "it would be impossible for us to bridge the distance in our vessel, particularly as we would first have to overcome our frightful velocity in the wrong direction."

"That is just what would help you. The problem is one of turning round in a wide sweep, then of decelerating; both of which could be accomplished by means of rocket-propulsion tubes and fuel we could provide. These tubes of ours expel the fuel at a relative speed nearly equal to that of light, so that exceedingly minute quantities of it have enormous propulsive power. Meanwhile any ill effects on your bodies would be prevented by compensating appliances."

I sighed. My duty was clear, yet it was a wrench, for Pahlo had become a closer friend to me than any I had known on Earth.

Unknown to me, my thoughts had been conveyed to him by the machine. "That is another matter," he exclaimed. "I was merely explaining how it could be done; you cannot be allowed to leave us, for we have not completed our studies of you."

Not having thought of the possibility of refusal I was greatly surprised, and launched at once into an explanation of why I must return.

"That," said he, "would, if the matter were not already settled, effectively prevent our granting your request. We on this comet are sufficient unto ourselves; in our passage through the universe we study many forms of life, some high, some low.

"We interfere with none, nor shall we until we find a sun suitable for us; then, if need be we shall be merciless. The ultra-violet rays of your orb are too strong for us; therefore we have left your system. If your races contend amongst themselves they must contend; if you wish to return and attempt to influence the result of this conflict, then our principle of non-interference will not let us permit it."

I was up against a brick wall. I argued, I pleaded, I pointed out that we were the victims of aggression, all without success. Nothing of this did I tell Heathcote.

V

THROUGH THE DAYS that followed I became more and more friendly with Pahlo. He took a fatherly interest in the slow development of my mind, in its gradual absorption of the comet-creatures' ideas. I was taken to see the *Aristotle,* now completely repaired and regarded as an object of interest. Great care had been taken, Pahlo explained, to destroy, both in the ship and in our bodies, any microscopic or sub-microscopic life that might cause harm on the comet. I now understood why I felt so full of health and energy.

Never did I relax my pleading, and, as the bonds between us became closer I felt that I was having greater effect. At last he said to me:

"Child, I have great news for you. Your request has been granted; you can return to your system. Such a step has never before been taken in the history of the comet, but I explained your longings, your desires, and it has been agreed. But I have become too fond of you to allow you to go straight back to destruction; I will give you some help in your war."

I suppose I should have been delighted at this, but I was sad. As time passed, and the preparations neared completion, I found myself longing to remain, striving to put off as long as possible the day when I should leave the comet forever; for it was futile to imagine that I could ever get back to it.

Pahlo had another interview with Heathcote, and that worthy thought that his own demands had secured our departure from the comet. I let him think so.

Well I remember the day of our departure; a black sea on which were red boats lapped in red foam on a dark red beach, and black and red plants grew on a black soil; for the light transformers had been taken away. Red ships carried the *Aristotle* up through red clouds that I could not see when I had the transformers on, to where a door opened to let us through the immense, red-lit mirror.

As the door closed I watched with sinking heart the great seeming hole in space, that was the comet, whirl away from us as we began to turn. All round were the cold, unfriendly stars, exactly the same as they appear from Earth except that they shone with a sharp, piercing intensity. But for the absence of the planets the sky had altered not a jot that I could see from how it appears from just outside the atmosphere of Earth; for two and a half light-years was such a short distance on the stellar scale that it was insufficient to alter the apparent positions of those distant worlds.

THAT IS THE END OF THE NARRATIVE the young journalist succeeded in obtaining from Felix Boddington, that strange figure who turned his back on the human race when all the riches and rewards Earth could provide would, at one time, have been freely heaped upon him. From now on we have to collect our material from the reports, letters and interviews of Captain Heathcote, with the accounts of other men who were with them in the latter stages of their adventures.

It was with immense satisfaction that Heathcote found himself again aboard his familiar vessel, its paralumin floors beneath his feet, his familiar control-board in front of him. The picture of his wife and child was still there, and with a sudden impulse he took it down and kissed it, his eyes very moist.

There was, of couse, a difference. For a crew he had Boddington only; he had been instructed to make no attempt to control the vessel, unless necessary to avoid meteors, until they were within the Solar System;

and they were forbidden to go beyond the small number of compartments where artificial gravity prevented their feeling the effects of the crushing swerve and deceleration.

The automatic arrangements whereby the comet-people ensured the return of the *Aristotle* were so extremely complicated that they have baffled all human attempts to understand or imitate them. Nevertheless, with a hint here, a suggestion there, they have thrown light on many an obscure point, and given an enormous impulse to terrestrial science and space-navigation. The composition of the rocket fuel they used seems to be beyond human understanding, but, at the moment of writing, it seems not altogether beyond hope that men may ultimately succeed in producing artificial gravity in crude imitation of that used by the comet-people.

From Earth they were invisible, as they were approaching it at a speed greater than that of light; while they themselves saw nothing of the sun. Light, I think, is the most baffling thing we know of. The time that a light ray takes to travel from one object to another depends on the distance between them at the time when the light wave (or light particles, as some scientists think) *starts* on its journey; it makes no difference how any of the objects move about after that. So if Heathcote had worn a hat, and that hat had been a light hour farther from the sun than Heathcote himself at a certain moment, then supposing Heathcote to recover his hat and put it on his head during the two and a half years the light was traveling, then Heathcote would see the sun an hour before the light he saw reached his hat. It seems to follow that he would see the sun through his hat if he tried, no matter how opaque that object might be. I give it up.

Heathcote fretted considerably at being unable to locate the sun. Using his most powerful telescopes he searched and searched for it, without result. The terrific discharges of the comet-people's rockets produced an incessant shuddering throughout the ship, the framework of which had been specially strengthened.

While there was never any real companionship between the two men they now learned to tolerate each other more. Heathcote began to recognize in the other's singular make-up the qualities of pride and courage, and tried to think that these compensated for other deficiencies. The only rift in the lute was the fact that Boddington merely laughed, and refused to share Heathcote's growing anxiety or his suspicions of the comet people because he had lost the sun.

After many days that cause of disagreement went, as the glorious sun, without the slightest warning, suddenly appeared — big, bright, blazing

and quite close, as though it had that moment sprung into being. As they watched, it split into two, one half becoming slowly smaller and fainter. They took it for an optical illusion, but it was merely the image that had set out for them when they were further away reaching them at last. For days they would be able to see this image of the sun when they looked in the right direction, but it dwindled so rapidly that after the first hour it caused them little inconvenience.

The ship passed through the solar system, then began to beat its way back, still decelerating: they fell into an orbit round the sun, then the vibrations ceased. Heathcote took over control and settled himself to the task of making the orbit of the vessel the same as that of the Earth.

"How long would you say it is since we landed on the comet?" asked Heathcote, looking up suddenly from some papers on which he had been making a series of calculations.

"Seven or eight months," said Boddington, promptly.

"Time must be different on the dark comet from how we know it," observed Heathcote; "the alterations in the positions of the planets show that over three years have elapsed since we left Ganymede."

VI

WAS IT A WORLD VOID OF HUMAN LIFE, run by invaders from Mars, or had they been successful in reaching it before the gathering storm broke? Heathcote had been careful to give the other planets and all recognized space-routes a very wide berth, so that their arrival would be unheralded. It was essential to their plans that the Martians should have no warning of the return of the supposedly wrecked vessel. As they looked down from space the world certainly looked peaceful enough, but that proved nothing.

"I'm landing," called Heathcote. "If the enemy are here our number is up anyway."

Using the comet rocket-tubes for deceleration, the ship plunged through the atmosphere at a rate never before attempted by a landing vessel. The ground poured up at them, continents and oceans flowing over the horizon out of sight. A strident piercing scream, suddenly blaring forth, startled Boddington nearly out of his skin: Heathcote had started his propellers.

The landing field in Pennsylvania appeared. They swooped down on it, checked sharply a dozen feet from the ground, then dropped with a crash.

Heathcote was in no mood for the niceties of a landing made according to the regulations.

A dozen men in uniform came running up, to the great relief of both of the space travelers. The foremost man was waving his arms in a request that a port be opened. Some time passed before his request could be granted, and the two men leaned out to hear what he had to say.

"Who is commander of this vessel?"

"I am!" snapped Heathcote.

"Then the commander of the spaceport wants to see you at once."

"Tell him he will, later," replied the captain, slamming the port.

"Fool," he observed to Boddington, "he knows perfectly well I can't leave the ship till I'm sure everything is in order. Let's see if we can find some cigars."

There were no cigars left in the ship's stores, but there was enough tobacco to make a pipeful each. After smoking these they made a leisurely survey of the vessel. Heathcote stood a long time gazing reflectively at the compact, powerful rocket-tubes from the comet.

Do you think," he murmured, "that I can certify that these things are, 'either unloaded or in such a position or condition of safety as to be incapable of causing damage or injury by starting unexpectedly?'"

At last the captain had satisfied himself that all was correct, then he donned his official uniform, swung open the main doors of the ship and strode out, followed by Boddington. Across the sparse turf they went and round the imposing buildings to the front entrance, through the imposing double doors, along a thickly carpeted hall to where Heathcote knocked sharply on a door marked, "Commander. Private."

Getting no answer, the captain pushed it open and strode in. A pale clerk at a desk looked up in surprise.

"Captain of spaceship just arrived, come to see the commander," announced Heathcote; "and tell him," he added as the boy moved to respond, "that we can't wait here all day."

The clerk blinked, then disappeared through a door. He was accustomed to harsh, bullying captains, but they usually cringed before the commander.

"What?" they heard an angry voice later, "I'll see him; I want to see him."

Waiting for no more, Heathcote opened the door and marched in, followed by Boddington. A white-haired man with a square jaw was sitting in an easy chair by an atomic heater. The boy, after a frightened glance at the intruders, fled precipitately.

"Who is this man?" demanded the commander, furiously, indicating Boddington.

"He comes with me."

For a moment it seemed there would be a conflict of wills between them on this point, then the commander went on to speak of something else.

"Well, captain," he began, with icy emphasis, "what have you got to say for yourself? You land here in rash, dangerous fashion; you fail to give warning of your approach or notify your intentions; you barge into my private room in a most insolent manner; and, as I have only just learned, the name of your vessel, the name of this company, even your planet of origin, have been painted out in the sides of the ship. Why is this?"

As he spoke his bullying manner faded before the unrepentant, truculent air of the other. Here was a man who had made his dismissal from Space Liners, Inc., certain, and who seemed indifferent to the fact; the commander's power over him was therefore gone.

"Our arrival must be kept secret," announced Heathcote, curtly. "The ship is the *Aristotle,* which was probably reported lost about three years ago. I have to report the loss of the cargo and all the crew with the exception of myself and this man here; and we have information regarding the matter that we must at once lay before an authoritative representative of the government."

"Aristotle," muttered the man in the easy chair, "yes, I remember the loss of the *Aristotle.* How do you account for her disappearance and where have you been hiding her?"

"Mutiny. It is about that I wish to lay information."

"You two are the only survivors, and the cargo is lost?"

"That is so."

"I see." The commander threw in a switch. "Martin there?" he called. After a brief delay the features of the hangar foreman appeared on a screen.

"Have you boarded and inspected the spaceship just arrived, Martin?"

"I was just about to ring you up, sir. Not a soul aboard, no cargo of any sort, and a lot of extraordinary fittings."

"Is the vessel damaged in any way?"

"Apparently not, sir."

Ringing off, the commander stared at the red glow of the atomic heater for several seconds.

"Who would you like to see?" he asked presently, his face inscrutable, "the State superintendent of police, I suppose."

Heathcote nodded assent.

"If you gentlemen will wait here I'll send for him."

"I have my doubts about that fellow," declared Boddington, when the door had closed behind him. "I fancy I heard a key turn in the lock. Couldn't he ring up the police from here?"

The tall man tip-toed to the door and stood listening. His ears were exceptionally acute, and he could just hear the commander's voice.

"That the superintendent of police? Deputy super? Well I guess that's just as good. I'm Charlesworth of Space Liners, Incorporated. Recognized me didn't you?

"Listen here. I've got two men locked in my private room. Yes. To be apprehended. May be dangerous. Yes. I'm charging them with murder and piracy in space. No, no definite proof . . . Good, do . . . Yes, the charge includes Martians, so that the representatives of that planet will have to be informed . . . Ticklish business, have to avoid stirring up interplanetary difficulties . . . Ten minutes, can't you get your men here sooner than that? They may be armed . . . Right you are. I am justified in using force to detain them . . . All right, but don't be long."

In more sober mind the two men might have foreseen this result of their precipitate actions. Their heads full of the approaching war, they had forgotten that they were on a planet comfortable in its calm security, who would see them merely as two men with wild tales, just as Charlesworth had seen Heathcote as nothing more than an insubordinate space captain.

Their hope of a secret warning was gone: They would have to declare their identity in open court, tell their story to defend themselves, probably, as the Martian representatives could pull strings, be disbelieved and jailed, perhaps executed; while the Martian preparations went steadily on, and the fiery doom of humanity drew closer and closer.

"We have been too hasty," Boddington summed up the situation, while Heathcote growled foul language.

Moodily, Boddington stared out of the window. Beyond a small courtyard where evergreens grew in tubs, and flowers, whose glory had departed for a season, lined the paths, past a garden where washing hung and a child's swing dangled from a tree, across a wide space where grass strove hard to grow on shingle, he could see the *Aristotle* being hauled into a shelter. Farther away, little distant autos crawling along the twin roads of the highway.

"Fifteen feet to the ground," he announced. "What of it, man of action: Shall we wait to be caught or shall we make a break for freedom?"

Heathcote looked out. A nasty drop, but soft earth to fall on. "Out with you," he said. Boddington lowered his long frame out of the window till he hung by his fingers from the sill. Heathcote, grasping his wrists, let him down the length of his arms.

"Now when you drop, land with knees bent. Ready?"

Down he whistled, scraping one knee on the wall. There was a violent jar, and he was momentarily uncertain whether he was injured or not. He found himself staring through a window, meeting the gaze of a motionless woman who sat at a table with a piece of bread halfway to her mouth.

Having no time to reassure her, he reached up for Heathcote. Losing his balance, he failed to catch him, but effectively broke the captain's fall by falling backwards with him and having most of the breath knocked out of his body. The statuesque woman had so far come to life as to have recovered the full use of her lungs.

There was nothing for it but to run. They leaped a white railing and raced across the sparse turf. Behind them the alarm was quickly raised, and shouting men took up the pursuit. A number of wondering mechanics in blue overalls appeared in their line of escape, and held out their arms like men trying to stop frightened hens. Boddington knocked three of them down with pole-like rights and lefts, while Heathcote tore into the group, all waving arms and legs like an angry kitten. It was hopeless: Realizing that there was a fight on, the mechanics struck back, and the two men, dazed and groggy, were borne to the ground just as the police plane settled down before them.

Within an hour they were locked in the cells.

There are still today many who who would like to know how the facts of the arrest of Heathcote and Boddington and the charge against them became public knowledge so quickly. Charlesworth denied telling the facts to anybody but the deputy superintendent; the police swore their every act was as laid down in the regulations; nobody questioning the mechanics was able to get anything out of them but, "don't know, don't know, don't know." Yet, before the keys had turned on the two, every News Service machine in America was blaring forth the words, "Mystery of the loss of the *Aristotle* solved. Ship recovered. Dramatic arrest of captain and passenger. Space-pirates trapped."

"Have important prisoners here," the superintendent, who had been

hurriedly recalled to duty, told an important government official in Washington, "on a charge that may lead to interplanetary complications. May be advisable to have them questioned."

The important official sent an unimportant official with a very important manner to conduct the interrogation. To him Heathcote outlined his story. "Seems to be a case of delusion," the unimportant official reported. Nothing more was done about it, but the machinery of the law moved in its usual way; the prisoners were brought out, looked at, and remanded for three weeks; then brought out, looked at, and remanded for four weeks.

Out in space the menace they had foreseen drew steadily closer. As soon as the Martian authorities learned that the supposedly destroyed *Aristotle* was recovered, with survivors, the great fleet that had been secretly growing for so long set out; spaceships sighted it only to be destroyed; and everywhere where Martians were gathered together they learned the news on their secret wavelengths, and any terrestrians near, succumbed while they slept, usually to the deadly *borga*.

Meanwhile Earth, though puzzled by the breakdown in communications, which was ascribed to magnetic disturbances from the sun, continued calmly on its way, discussing the most painful treatment that could be inflicted on the men who would have warned it; for the horror of their crime had inflamed imaginations.

Then occurred, in the words of one of the News Service Companies, "Heathcote's outburst from the dock. Expert's opinion that he is insane."

The facts were these: the young attorney who at first agreed to conduct the defense in the hope of obtaining considerable notoriety refused when he heard the impossible story they put forward. Heathcote and Boddington were therefore obliged to conduct their own defense. The case against them rested so much on premises and assumptions that those responsible for conducting it sought to put it off as long as possible in the hope of more definite details coming to light. They had just been remanded for the third time and were about to be led away, when Heathcote, in the words of the News Service, "became very excited and started shouting loudly."

He declared that he objected to these repeated remands, and demanded that the "poltroons and cowards" bring forward their accusations. Was there any justice today or not? (At this point a policeman reached out to take hold of his arm, but was sent staggering by a push from Boddington, who had been leaning against the dock in such a manner as to suggest he was incapable of rapid movement. Other policemen rushed

up.) Their story was true, they had been overwhelmed by a mutiny of Martians. Other ships had met the same fate, which was the reason why no messages had been received. The Martian menace was rapidly approaching the people who sat so smugly in the courtroom, and when they saw their cities leveled by fire and ruin—.

That was as far as he got. The prosecution seized the chance for further delay by asking for a medical report on the state of his mind . . .

The "message that staggered the world," as some writers have called it, came three days later. Actually it did nothing so energetic as that; people listened to the account at their breakfast tables, then turned the dial until the indicator pointed to Sports, for the great annual Chicago Stakes for three year old colts and fillies was scarce a week away, and hardly an adult in the world but had at least a tenth of an international credit unit on his fancy. In an ultra-mechanical world, the racehorse had gained instead of lost in popularity.

The message came from space, from a small vessel with a crew of four pleasure-cruising between Earth and Venus, and, after they had given, very briefly, their identity and approximate position, went on thus:

Piracy and Murder. Some six hours ago we sighted a vessel proceeding from Earth, as though making for Mars, and, about the same time, seven others approaching it from the opposite direction. Received messages from the vessel bound for Mars, but were unable to reply owing to our transmitting gear being out of order, a fact to which we undoubtedly owe our lives. The approaching ships remained silent, and, when they were within close range of the Earth ship, the latter suddenly blew up. Being to sunward of the fleet we were unseen by them, and changed our course to follow. Later saw another vessel similarly destroyed.

Magnetic tension among our instruments proves that they have succeeded in locating the source of our signals, and are drawing us towards them on a magnetic beam. May be silenced at any moment now.

The pirate ships seem to be sixteen in number, a group of nine following the first group of seven. They are at least three times as as the biggest vessels previously known, are roughly the shape of fish, appearing from the sunward side like polished aluminum, and are approaching Earth at—.

That was all. The speed of the hurtling menace was never transmitted.

People heard the News Service comments on it, and it formed a topic of conversation second only in importance to the big race. Experts were able to state that the authorship of the message and the location of the transmitter were as stated, but as to its truthfulness, of course, they were unable to say. Some acute persons, connecting it with Heathcote's outpourings, suggested that he had accomplices. Discreet inquiries failed to disclose any connection between either of the accused and anybody known to have been on the ship.

The news service companies made all possible capital out of it, in long vocal articles on, "Is Heathcote right?" proving that the fleet described could not possibly exist; that Martians were not capable of waging war; that if the fleet had left Mars at the time when communications first began to break down they would have been here before now, and that such a fleet would not pass the point indicated in the message. A few nervous persons were reassured.

To us who know the course taken by subsequent events all this seems incredibly foolish; it is a fact that the Martian fleet took a long time over its journey and chose a circuitous route, but their reason for doing so seems now so obvious that it is almost incredible that it should not have occurred to any of the supposedly intelligent men who examined the question.

Any experienced space-traveler knows that a dark object on the sunward side of one is practically invisible unless one is in its direct shadow; the Martian plan was to approach Earth from its sunward side and to hang, imperceptible in a sunlight sky, attacking that part of Earth in the twilight belt.

That is why the disasters, when they did occur, always happened either about the hour of dawn or approximately at sunset.

VII

THE ASTRONOMICAL OBSERVATORY ON THE MOON reported the occulting of certain stars by unknown moving objects. Some discussion in scientific circles followed, and outgoing ships were warned to keep a sharp lookout for meteors. Thereafter the moon shared in the general silence.

The facts of the destruction of Tokio are too well known for me to recount them here. Situated in the most densely populated part of the world, the fourth largest city on Earth, having the largest airport, hous-

ing the biggest air-liners in the world, it was completely wiped out by what was thought to be a terrific earthquake in the early hours of the morning on the 19th of July, 2257. Scarcely was the world aware of the shock before Winchester the most important space and airport in existence, suffered a similar fate.

A man with sharp eyes looking through a telescope towards the rising or setting sun when it was not quite light might have noticed several short lines barely visible in the sky, the sunlight reflected from the extreme edges of the Martian vessels, as the moon appears at its first, faintest newness. Intially they attacked only the strategic points of the planet, and every place to suffer in the first onslaughts was either a spaceport, an airport of importance, a power works, or a center of government. Each was bewildered by these rapid blows.

Then a news service operator succeeded in obtaining a complete film of the destruction of Chicago. Traveling over the hills overlooking the town he saw what he took for an extensive fire, and obtained a private airplane to take a picture of it. Fortunately for himself, the many planes he saw crashing inexplicably over the city caused him to keep at a considerable distance. Owing to the mistiness of the morning he used an infra-red film to get a clear picture, and the heat rays of the invaders came out clearly on it.

It is an awful picture, totally unfit for publication. It is reported that the hardened checkers of the news service company who, gloating over their success, viewed the picture before passing it for publication, screamed with terror at what they saw.

The film has been preserved as an historic record, and can still be seen by the curious. In the uncanny clearness of ultra-red photography the city stretches out before us, looking somewhat unnatural because distant objects are as distinct as those nearby instead of being veiled in a film of mist. There are the wide roads, the flat roofs of the spacious city with airplanes setting off and alighting and pleasure boats on the lake; even the obsolete railway stations are shown with pitiless clarity, and somehow take on a beauty of their own.

On the extreme right appears the race course with its huge stands, a certain amount of activity already going on about it; for, by an ironical stroke of fate, the disaster occurred on the morning of the very day when eighty-seven of the fleetest horses in the world were to line up at the gate before starting on the mile and a half of the most important race in the world. Flags are flying, and one huge banner bears a bookmaker's advertisement for posterity to read.

Pale white beams, invisible to the operator, but clear to the eye of the camera, are shining slantingly down from the East, which the shadows show to be the direction of the sun. Distant buildings are crumbling and smoke is rising everywhere in the track of the moving beams, the source of which is far away in the sky. Suddenly one passes in the foreground, leaving a wide trail of conflagration and ruin; there is much confusion, small figures moving erratically about in the visible parks and roads, a man and woman pushing a child in a perambulator being particularly distinct.

She snatches up the child and runs with it just as another beam, passes near. Then it was, probably, that the checkers screamed; one is not prepared to see human beings caught in the beams . . . It is said that nobody has ever seen that film through to its conclusion, to when nothing remains of the vast cosmopolis but one extensive, smoking ruin.

The panic caused by the bare recital of these facts has been recorded in a thousand places. How ripples first, then waves of terror, spread in a few hours over Earth; how people flocked out of the towns that were obviously the marks of the attackers, seeking open spaces, how great communities gathered together away from their homes, and how exposure and lack of food, water and sanitation caused double the damage of the Martians did directly, is not for me to record here. Our concern is with Heathcote and Boddington only.

An order withdrawing all charges against them and directing their immediate release arrived at the jail at 3:30 p. m. The governor, after having the order repeated into a recording machine to safeguard himself, (governor, jail, machine and record were all destroyed several hours later) sent for them and informed them personally, and the two walked out. Their first act, on finding themselves in the streets, was to spend a fiftieth of a credit unit on "See and Hear" machines on a corner' for, although they knew the main facts of the war, the news had reached them only in vague, general terms.

However, what they learned with their eyes to the eyepieces and their ears to the phones contained little that was new, for already the organization of the news service companies was beginning to break down. A confirmation of the urgency of the situation, the names of more places that had suffered, a vague exhortation to be calm, such was the net result of their expenditure.

Airplanes thronged the sky, and there was a general air of aimless haste: an old man, well-dressed and with streaming white hair, rushed

down the center of the road screaming, "It is the end. The end. Humanity is doomed."

Boarding an air-train for the short distance to the space-port, they found it as yet unharmed, being one of the smaller places as yet undisturbed by the Martians. Walking irresolutely across the ground, a man, looking haggard and thin, proved to be Commander Charlesworth. Perceiving them, he seemed to be turning over possible greetings in his mind: finally, "What do you want now?" he demanded, hoarsely.

They made known their desire to assist in any counter-attacks being made on the Martians. "And what have I got?" cried Charlesworth "Vessels a hundred yards from stem to stern against ships that must be, if that message from space was true, more than half a mile long. Midges against elephants."

"Something must be done," snapped Heathcote, "if only to distract their attention for a while. How many can you spare?"

"Jack," it was Boddington's voice, "if we had the *Aristotle,* her speed would enable us to leave the others far behind. Give us six men and let us skirmish on our own account."

"It could be arranged," said the commander.

After consideration, Heathcote assented, and six volunteers, they could have had twenty, were called for from among the mechanics. Shaking hands with each man, the commander wished them good luck and a safe return: Who was to know that another hour or so would see the occupants of the *Aristotle* alive and well, and the commander and all others at the spaceport still in death?

Let run at full blast, the propellers screamed in agonizing intensity as they dragged the vessel upwards. When they reached what they thought was a safe height two of the comet rockets were discharged at a fraction of their power; onlookers were thunderstruck to see a great trench torn in the ground, an old, fortunately deserted, building collapsed, and the spaceship, in marked contrast to the usual painful initial climbing, sail upwards with the ease of a lark. To this day Heathcote's Dip is pointed out to wondering tourists.

"All hands to muster on floor number 10." The strident, mechanical tones rang through every compartment. When satisfied that everybody was present Heathcote announced, "I am about to put on extra acceleration in order to pass the enemy ships and get to sunward of them. No one is to leave this floor until I give permission."

The men stared in amazement. Was the man mad? Extra acceleration? Already they had endured fifteen minutes of acceleration such as

never had been heard of before. As they thought this they felt the force that had been tugging at their bodies with twice the strength of gravity removed; only a normal gravity remained.

"But you've stopped accelerating, Cap," observed one, presently.

A slight smile played about Heathcote's lips as he suggested to the speaker that he look out of the window. The man did so, to stagger back with an incredulous cry; and forthwith the window was crowded with staring, astounded men. Instead of seeing Earth as a huge body filling the heavens it was a distant globe, still retreating.

"You see the effects of my extra acceleration," observed the captain, "in spite of the fact that I applied it for a few seconds only, until we were past what I judged to be the danger zone. You were prevented from feeling the effects by the artificial gravity adjuster beneath your feet, which under any circumstances maintains the conditions to which it is set, at present the amount of gravity normal at the surface of Earth. Now you know our chief weapon, our frightful, unheard-of speed. While I maneuver into a position where we can see the enemy without being seen by them I want you to discuss plans of attack."

An intelligent-looking man suggested that they should set up an orbit round Earth that would carry them close to the hostile ships and play rays on them every time they passed; their speed would enable them to get away before they could be struck at.

"So I thought, at first," remarked Heathcote, "but have you considered how brief the application of our rays would be? How can we hope to damage ships with armaments such as they have in such a way?"

The approaching Earth loomed larger beneath them, and they were able to detect in telescopes the Martian ships shining gray in the full glare of the sun, looking exactly like a school of fish seen through still water on a summer's day. So peaceful did those still, slender shapes appear that it was difficult to believe they constituted a menace to the people on the ground below.

"Our weapons are so feeble," muttered one of the crew, "it seems to me that our rockets themselves are the only means of striking an effective blow. After seeing the gash they tore in the ground—"

"How are we going to get close enough to aim? We should have to go so fast as to miss 'em by hundreds of miles," said another.

"What I say is," went on the first, "to barge slap through the middle of 'em, then, while they're all around us, fire the tubes blindly every way at once. Bound to hit some of 'em."

"You think," asked Heathcote, "that would be sufficient to cripple any vessels we happened to be lucky enough to hit? Yes, I think so myself. The trouble is that we should almost certainly be annihilated ourselves by a collision with one of the enemy; and, while I know we are all prepared to face that, there would still be enough of them left to conquer Earth."

At this the tall figure of Boddington, who had been staring in a dreamy fashion at the ceiling, stirred and spoke. "I have been listening to your plans, gentlemen, to see if you have any better suggestions to put forward than the one I am about to make. The scheme of using our rockets as weapons is good, but I think mine is still better — and even if mine fails, yours can still be used.

"Before I left the Dark Comet, the people who inhabit it — I had become very friendly with them — installed in this vessel a weapon for use in this very war, and instructed me in the operation of it. I require six assistants for its operation, which is the reason why I requested six volunteers. We have already a lesson in how efficient the machines of those people can be in the surprising effectiveness of their rockets. Shall we try it?"

Wondering, the men agreed.

"I must ask, captain, that I be in sole charge of the ship for a time. Everybody will follow me." With these words he led them to the floor below, where all were obliged to wear magnetic shoes to get about in comfort. Here was a row of six machines, each about four feet in height, and housed in green metal.

"You thought this was part of the gravity adjusting machinery, didn't you, Heathcote?" Taking a gray brick out of a metal box securely clamped in a corner of the room, the tall man pushed it into the machine through a door in its side. It struck against somethink with a clear, ringing sound. Then he fiddled with various handles, and a dull throbbing filled the room.

He now became intent on a metal sheet in front of him, shouting out numbers from time to time. "All set," he announced at last. "Now you can all come and see for yourselves."

Looking over his shoulder they saw, mirrored on the smooth surface, a picture of the edge of Earth with the Martian vessels poised, motionless, above it, and a brilliant white spot glowing in the space near them.

"That is where my ray is focussed; although it shows clearly on the indicator, it cannot be seen outside, and only ourselves are, so far, aware of its presence."

As he moved two tiny dials the spot moved until it hid one of the enemy ships from view; instantly there was a blinding flash of light as the sides of the shp reflected back the light for a few seconds, a puff of red, then nothing remained but a cloud of gas.

"One of the devils gone," shouted a mechanic.

Hardly had he spoken before another had the way of the first. Now Boddington and his volunteers got to work in earnest, and the startled ships began to dart like frightened fish in all directions; but their fate was inexorable.

"What frightful ray was that you were using?" asked Heathcote, when the last had been reduced to gas. "How could it be so effective over a distance of thousands of miles?"

"Nothing more than the light and heat of our old friend, the sun. Those comet people understand radiation to an extent that we cannot hope to equal for a long time to come, even with the amazing proliferation of scientific knowledge and technology that we have achieved in the last century or so. This machine produces a field of force, partly magnetic in character, which has the property of refracting light and heat in much the same way that glass, water, gas, or any other transparent meterial does. This field of force, extending around us for hundreds of miles and being thickest in the center, focussed the rays of the sun as a huge burning glass would. It is a weapon against which nothing can stand, as the tremendous force it uses is nothing to that it controls. You will find that brick of fuel I used somewhat smaller now; part of its substance has been entirely converted into energy. Unfortunately, some of our victims fled across Earth, and we have caused some damage there, but it could not be avoided. Now let us give the planet Mars, itself, a lesson."

They went on to a point between Mars and the sun, and, using a field of force tens of thousands of miles across, focussed it to a diameter of a hundred miles on Mars. One of the men was kept busy feeding brick after brick of fuel into the machine. On the surface of the planet, as seen in the viewing screen, appeared wide, wavy lines of black running round and round the planet as it turned with its own motion; as the heat spread through the globe the polar icecaps dwindled rapidly. Frantic appeals to stop reached them and they finally learned that Mars had accepted Earth's peace terms.

"The job is done," said Boddington, "and now I have one more thing to do." Taking a heavy spanner, he smashed the most intricate

parts of the machine to fragments. "That," he explained, "was in pursuance of the promise I had to give before I was allowed to have the weapon.

"Now to return. Messages we have received from the provisional governments of Earth tell us that a grateful people have transferred a large amount of credit units to each of us. Heathcote and I, and to a lesser degree each of you, are now wealthy men. Personally, I shall accept but little of their gifts; for I do not intend to return to Earth, but am going to get a party together and spend the rest of my life exploring the Solar System. Who comes with me?"

All six men offered to accompany him.

"Myself," said Heathcote, "I shall return to my family and continue in my old job as space captain."

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On The Cover

The picture you see above, and the smaller fragment of it that appears on the cover, are both from a black and white reproduction of a painting by Frank R. Paul, which was used for the cover of the August 1929 issue of *SCIENCE WONDER STORIES.* We have presented as much as we could without showing the type which appeared as well.

The explanation for this scene, which appeared on the contents page of that issue, tells us that Paul's cover illustrated ". . . Captain Noordung's Space House. The view is shown from another space flyer with the Earth and Moon seen through the window of the observers. In the center is the space house proper, which has a total diameter of 150 feet. The wide curved surfaces are the reflectors which collect and concentrate the

sun's heat. Attached to the space house by means of flexible cables, at the left is shown the observatory and at the upper right the engine house. All three objects remain fixed in space, there being no gravity to dislodge them."

This was the first time that a science fiction magazine depicted a space station, and it may be the first time that such a thing was described in a scientific article. Captain Hermann Noordung, A.D., M. E. (Berlin) was a pioneer in rocket and space research, and Hugo Gernsback had this essay translated by Francis M. Currier, to run in three installments in the July, August, and September 1929 issues of his then new publication, *SCIENCE WONDER STORIES.* Diagrams and further illustrations by Paul and others were included, as well as stills from some of the German science fiction films which were current at the time.

Today, even though a space station lies still in the realm of science fiction, and even while (to the oldtime enthusiast at least) this picture has a wonderful appeal, there seem to be many quaint aspects about it. Not only has research gone far beyond the points that Captain Noordung pioneered so well back in the late '20s, but there is a distinct 19th century feeling about the designs. Perhaps quite a number of the author's principles are so sound that they will be employed in a real space station (if one is ever built)—but if so, we can be sure that it won't look like this!

Almost to the time of the first *Sputnik,* however, science fiction authors here in the United States, and in England, had just about nothing in the way of technical articles to go upon, in imagining space stations and artificial satellites, except this translation of the Noordung essay. And a very interesting anamoly came out of this, for all the space satellite stories before *Sputnik* had the same flaw, and for the same reason—namely, that Gernsback abridged the article, or had Mr. Currier do so, for his readers (it was very technical) and as a result nothing is said about the fact that a satellite of Earth must have an orbit. It won't just "hang out there in space" fixed; it will be in different positions, relative to any particular spot on Earth, at different times.

I may be unfair to an author or two who was an exception; but some years ago, when a special article was written by Dr. Richard Macklin for *SCIENCE FICTION STORIES,* dealing with space stations in fact and fiction, the author and I looked through all the old magazines of the 20's and 30's for stories dealing with the subject, and did not find any which had not been based upon Noordung's abridged article, with the limitations that arose from those missing sections. RAWL

THE ELIXIR

by LAURENCE MANNING

(author of **Voice of Atlantis, Seeds From Space**)

Again the world had changed; a different civilization greeted Winters when he awoke. And now he learned that his travels via suspended animation must end, for his aging body would no longer be able to endure the strain of such sleeps and the awakening from them. So here he must stay—but his days need not come to a close soon, if . . .

THE SPRING STORM LASHED THE HILLSIDE with a bite and fury it had not held for fifty thousand years. It was May, but the wind struck chill on the ground and the palm trees were in brown ruins—the whole tropical verdure of the Great Lake region was doomed. The cycle of climate had swung around and it had been growing steadily colder for a thousand years, perhaps to presage another ice-age. Under a clump of dead palms some stone ruins showed gray-white and under the fierce wind the water rippled across them like wrinkled silk.

So far as the eye could see the landscape stretched open and deserted. Nothing alive was out in such a storm. But presently one of the white stones moved slightly. Had the ground sunk beneath it a little? But why *now*, why not some other time during the thousands of years the ruins had lain there? Then it moved once more—slowly and definitely. There could be no mistake. It was a slab of rock three feet across and must have weighed two hundred pounds, and suddenly one end sank deep in the earth.

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We come now to the final story in Mr. Manning's "Man Who Awoke" series, and for the sake of those who missed the earlier tales, these appeared as follows: *The Man Who Awoke,* FSF #3, Summer 1967; *Master of the Brain,* FSF #4, Fall 1967; *The City of Sleep,* FSF #5, Winter 1967/68; and *The Individualists,* FSF #6, Spring 1968. In the present tale, Mr. Manning explores a theme which even now is not stale in science fiction, because the problems surrounding it have yet to be solved, if indeed they are solvable: not absolute *immortality,* but the extension of a person's span of life in his present body through a means of restoring aging cells and thus regaining youth.

After a moment the whole slab vanished from sight, leaving a deep hole yawning there, down which the rain poured muddily. Up through the black cavity came the head and shoulders of an old man.

The face was white and unkemptly bearded and the hawk's beak of a nose was covered with skin tight-stretched, like that of a mummy. Two piercing gray eyes peered out beneath bushy, overgrown brows and seemed to darken as they looked, as though disappointed at the sight. Two thin hands with nails soiled and broken by much recent digging rested on the edge of the hole and with an enormous expenditure of effort Norman Winters drew himself up and stood on the surface of the ground.

Ten thousand years ago he had gone down under the earth and left a new and thriving city above him. Five thousand years later he had awakened and found ruins in a mad world from which he had quickly retired. Now he had awakened again, eager to see what changes time had wrought. His clothing was ill-adapted to the cold and he drew his tunic of heavy silk closely about him and shivered.

"It might as well be a new world, for all I know about!" he muttered.

Visibility was poor through the driving sheets of rain. To the west rose the hill, to the south stretched the forest with half of the trees showing the brown color of death, and to the east a semi-open country stretching (he knew) to the horizon. On the north lay the troubled waters of that inland sea once called Lake Superior.

"Twenty-five thousand A.D.!" said Winters. "I have to find shelter and people before I starve to death in this wilderness!"

South, east or west? Winters started east, chiefly because the ground was clear and walking thereby made easier. It was impossible to guess the time of day, but he plodded on—weary and sodden—the sharp

eyes roving in search of any signs of human habitation. Hour after hour he walked, soaked feet pressing sloppily into the flooded soil at each step, wondering whether he would ever come to anywhere and rather doubting that he would. Darkness overtook him and he made a crude shelter under a fallen palm, whose great dead leaves made a sort of tent at one end of the tree. He ate a handful of concentrated food from his pocket and, protected from the water by a slight knoll on which he lay, slept fitfully until the gray dawn awoke him. Wearily he resumed his plodding progress.

An old man cannot lie in a coma for five thousand years with impunity, even if, upon awakening, he spends a week in bed recuperating and has to have stimulants and nourishing food once made ready for him by the super-medicos of the hundred and fiftieth century. Winters was near exhaustion and his face showed gray instead of white and his breath came in painful gasps. He sat down against a large tree whose leaves still showed green and thought unhappily of his fate.

To come successfully through the long sleep only to die of exposure and starvation (for his food was gone) in an unfriendly world! Where were the people? He dropped off into the easy slumber of age and slept for two hours. He awoke, somewhat refreshed, and set off through the storm, wearily and slowly, only his eyes were as eager as ever. Winters was the kind of man who persisted in the face of the impossible. True, he was probably going to die. At the same time, here was the future world he had wanted to see—well, look at it as long as you can, thought Winters! Now he crested a slight rise, beyond which the gound sloped away out of sight in the mist. Down he plodded, a pathetic figure, until he too was swallowed up in the driving storm and could be seen no more.

Ponceon had been working over his germ culture jars all night, while the other biologists slept. It had been that way from the beginning—his work had been the only real labor performed. True, Fastak and Mintal had made valuable suggestions from time to time and old Pondero had helped him now and then, with the cell-breeding. But he—Ponceon—was the real experimenter and now that the process seemed near completion he realized that its success was owing almost entirely to his unselfish, painstaking work.

Dawn surprised him still bending to the task and he straightened his back and rubbed it where it ached. He looked through the great viglass dome at the dreary world outside and noticed idly the rain still

beating down from the gray sky. It didn't occur to him to feel sorry for anyone out in the downpour, for why should any human being in this day and age leave his comfortable living-quarters? But he did look at the rain which droned against the dome and so he saw the face.

It was white and whiskered and the nose pressed against the glass heavily, as though its owner could not hold his head up. As he looked, the face disappeared!

"By the Brain!" exclaimed Ponceon. "Was that fish, flesh or fowl? Or was it—could it be too much night work? No . . . I *saw* it, all right! That snarling mouth with *teeth* behind the drawn lips!"

He decided some ape-like animal must be outside and shrugged his shoulders. The glass was thick and outside it was the jungle. Then, as he continued looking , he saw an emaciatied human hand clutch at the glass and fall weakly away in a gesture that spoke volumes. Someone needed help, decided Ponceon, and dashed forthwith for the double door (air-sealed) that gave egress to the outside world.

In his haste he had not thought of clothing himself warmly; and after the artificial atmosphere inside he found the storm's blast breathtaking. But it was only a few yards from the doorway to his destination and he hurried. Prone on the ground lay an old man in strange clothing and Ponceon gently raised him in his arms, almost shocked at the lightness of his burden. By the time he got safely inside his clothes were soaked through and his face dripped blearily from the sheeting rain.

The others in the laboratory were not yet awake and, anyway, Ponceon was a competent biologist and needed no help. He carried Winters into his own chamber and stripped off the soggy clothing, to stand a moment in stunned surprise at the sight of that hairy, twentieth century body. But there was no time now for observation. The old man was suffering from exposure and Ponceon rolled him warmly in coverings and laid him on the couch. Then he stepped over to a metal dial face on which appeared eighty-four minute levers.

Thoughtfully he pulled down lever after lever, until seventeen were depressed. In a vertical row beneath each lever were buttons and to the accompaniment of much head-scratching and chin-stroking, he pressed a number of these, correcting and changing the formula as he went along. When he finished he pressed a white button and there was a musical note from behind the wall. Then he set a hand on a clock face and moved a sliding button up on a thermometer dial and, after a last glance at his set-up, pushed a red button.

He waited expectantly for three minutes and then opened a small glass door and removed the chemical he had created. It was a dark gray liquid and quite warm to the touch. Ponceon smelled it gingerly and, nodding approval, carried it over and forced it slowly between Winters' thin blue lips. The effect was almost magical. The old man's pale cheeks showed slight signs of color and the rigid jaw muscles relaxed slowly. His breathing became fuller and stronger and after a minute or two a slight sweat beaded his forehead beneath the shock of white hair.

Ponceon smiled and yawned hugely. He was tired out with his night-long labors and removing his own sodden clothes lay down on another couch and was promptly asleep.

Winters awoke during the following night, a little before dawn. He could not imagine where he was, but the bed and the warm coverings were palpable to his touch and he lay there wondering weakly until the window at the end of the room showed morning gray. Then he made out dim details — a laboratory fixture beside the window, a couch on the other side of the room and a strip of storm-drenched jungle outside. He rather thought the other couch was occupied, but it was too dark to make certain and he was too tired and weak to bother. He fell asleep again.

When he awoke once more, it was to look into the mahogany-brown face of a young man who stood over him with a glass in one hand. For an instant they gazed at each other, these two. The face he saw was a kindly one and marked with the signs of energy and intelligence. The young man smiled and showed a neat half circle of pink and white gum nails between the clean-cut lips.

"Who — and what — are you?"

"I am called Winters and I am — well, a traveler of sorts."

"Then you *are* human! I wasn't even sure of that! You have teeth and hair grows on your skin!"

"Do you know anything of the history of the human race?"

"Yes . . . some. But what . . . "

"Twenty-three thousand years ago, when I was born, all men looked like me."

"What are you saying! Twenty-three thousand years ago!"

"Yes. My story was well known the last time I visited the surface of the world. That was only five thousand years ago."

"Why, of course! Now I remember something . . . where was it? I've forgotten, but no matter. I thought it a myth. Was it not you who was supposed to have retired into a cave beneath the earth and to have

slept under drugs. The legend has it that you twice saved the world from extinction—once by destroying the Brain and again by leading the great Exodus from the City of Sleep. Can the story really be true?"

"It is true—more or less. But how did I get here? I remember walking for days on end through the storm and then . . . here I am, snugly in bed!"

Ponceon smiled down at the old man and related how he had brought him in, unconscious. "You have had a narrow escape," he added, "And . . . it has weakened you seriously. I am afraid your travels into the future are over, Winters!"

He held the glass to Winters' lips. "This will strengthen you," he said and added: "What an extraordinary thing it is to have the mythical Winters come to life in this laboratory!"

"Why *this* laboratory?" asked Winters, choking over his drink—which he found breathtakingly pungent.

"Because you have found a way to make yourself live thousands of years while we here have just perfected a method for human immortality!"

And at these startling words Winters' age-lined face stiffened and his muscles trembled as though each protoplasmic cell had heard the statement separately and strained with individual hope. His face whitened and he rose slowly on one elbow to stare at his host. He must have heard the word wrong. "Immortality!" he whispered, and suddenly realized how old and tired he was—how weary of the things of life. A vision of the world of his youth rose before his eyes in a surge of nostalgia and he saw faces dead for thousands of years and thought of old, forgotten ambitions and hopes, a world-full of them, that had died with their disillusioned owners. Tears filled his eyes.

Ponceon was smiling at him. "We have been working on the problem for centuries and the four of us here have finally succeeded in overcoming the last obstacle. Now" (he straightened his shoulders proudly) "we shall *march*—we humans!"

"But how horrible!" said Winters. "How terrible to continue living—weary and old!"

"Old? Not at all. When you are stronger I will show you and explain. But sleep now."

Ponceon left the room and proceeded to the laboratory where an elderly man of huge girth greeted him enthusiastically. His face was lined with age and his hair white with many winters. "Pondero!" exclaimed the young man, "You will never guess who the stranger is! *He's Winters,*

the legendary time-traveler!" Two young men crowded in from the next room at his words and before an astonished audience Ponceon repeated his story.

"We must make him young again—what a chance to try out the full cell-cycle!" said Mintal, his walnut-tinted face glowing with interest.

"We must first finish with old Pondero here," said the lean and cynical Fastak. "What is his record to date, Ponceon, two hundred?"

"Two ten—sixty more cell types to go. Are you ready, Pondero?"

With a grunt the great body lowered itself upon an operating table and the three young men busied themselves preparing for a surgical operation in the region of the head. The odor of anaesthetic filled the room.

Many hours later the three stood beside Winters' bed and discussed him in low voices.

"If we can work with *him,* we can work with *anyone!*"

"It will save going off in the airship to find another subject—it's not easy to find an old man willing to risk his life."

"Suppose this Winters fellow objects?"

"Hmm! In the normal course of things he hasn't much longer to live—I examined him and I know," put in Ponceon.

"Then why not . . ."

Ponceon nodded and beckoned to the others, who stooped and carefully raised the frail figure from the couch and along the corridor to the laboratory. They strapped him upon the operating table and Fastak brought forward a tall rack-stand on rubber wheels. In it were placed, row upon row, two hundred and seventy test tubes, each set in a bath of warm liquid. Mintal was sponging off Winters' body with a disinfectant while Ponceon applied the anaesthetic. Then, all three armed with lancets and a battery of syringes, they set to work. Two hours later Ponceon straightened his back and counted the syringes left in the used test tubes. "Ninety more to go—two thirds of the way through," he announced. "I'll do the brain cells and you two finish the body."

Mintal grunted. "Quick work . . . hope he can stand the shock!"

Fastak was feeling the left lower abdomen. "Something wrong here! Have you the fluoray, Mintal?"

A sort of electric torch was passed to him and he placed one end against the white skin and peered through the other end. "Unbelievable!" he said.

The other two young men dropped their work and hastened to look.

"It's some sort of vestigial organ."

Ponceon walked over to a bank of buttons on the wall and began pushing one after another, gazing intently at the wall beside him as he did so. Pictures flashed there in response and presently he found the think he wanted and studied a portrait for several minutes.

"It is a kind of second stomach which all men used to possess thousands of years ago. It was called appendix vermiform, not that that helps much. I'm afraid this ends our chances."

"Shame to waste all our work."

"Why not cut it out—remove it entirely?"

"Of course! Why not? Try, anyway."

And they set about the performance of an operation once common in the world but long since forgotten. Carefully they scraped away every last vestige of the tissue and continued with the main operation of lancing and injecting cell tissue from the tubes on the rack. Then Mintal came to the tonsils, another portion of the body which had no two hundred and fiftieth century counterpart. The tonsils, also, they removed completely, dissecting out every microscopic particle of them. The teeth they left in place for future consideration.

The sun was setting when the work was complete and Winters was placed on a wheeled cot and trundled along the corridor to a room which was obviously devoted to hospital work. Pondero's great bulk lay quietly on a similar cot and after a careful examination of both patients the three young men left the room, ate their evening meal and fell promptly asleep, worn out with their day's efforts.

II

THE SUN ROSE AND SET THREE TIMES and brought fair weather—so fine that the three young men found it more pleasant to walk out of doors than remain in the scientifically correct climate of the laboratory. Spring dawned in those three days and leaves sprouted —but it was too late to save the tropical vegetation killed by the severe winter. Birches showed white and maples flowered redly in the swamps while the semi-tropical trees died in brown ruin. It was on this fourth day after the operation that Winters struggled back to consciousness.

The old man had come close to the brink of life. He had lain in a world of alternating blankness and phantasy. In his dreams he lived once more in New York of the twentieth century and saw anew those dear familiar faces long dead. His first emotion upon opening sane eyes was one of melancholy for all that had passed. Nevermore could he visit

scenes of the old days. Yet, he reflected, what really did it matter to him who was in turn so soon to die? What was it the young biologist had said—that he would make no more time journeys? Well, he still knew nothing of the present age.

He felt stronger, somehow, and a trifle impatient at lying on this cot, inactive. Strange, though, how vigorous he felt! Up he rose and would have dressed but found no clothing, so he drew a sheet over his shoulders and walked to stare through the window at the glorious sunlit sky and the trees sprouting new growth.

He turned suddenly at the sound of someone entering the room. It was a rosy-cheeked youth—far, far too fat—whose dark brown skin glistened as though newly stretched over the plump cheeks. The youth stared unbelievingly a moment.

"Winters!" he cried at last. "By all that's wonderful! You look like a new man!"

"I'm afraid I don't know you. How do you know my name?"

"Oh—that's right. I am Pondero. I was operated on the same day you were and look at me! I don't feel a day over twenty!"

Winters stared. "Why should you?"

"What are you talking about, man! I am seventy years old . . . but you *don't know!* Oh, this is glorious! No one has told you about your operation?"

"*My* operation?"

But his acquaintance had rushed from the room waving his hands wildly above his head and Winters was still staring at the door when he returned accompanied by Ponceon, Fastak and Mintal. Pondero carried a mirror. "Look at yourself, Winters!" he cried as he thrust it in his hands.

And Winters looked.

He saw the face he had almost forgotten—the face of himself as a young man. The nose was fleshier—the eye brighter and, somehow, changed. Here and there a few lines remained—the marks of experience never to be effaced. Unbelieving, he gazed at the darkened hair, the plump neck and felt the firm rounded muscles on his arms. A wild thrill of hope—so vague that he could scarcely define it—surged through him. What had Ponceon said about *immortality?* He licked his dry lips. "Is is . . . did you make me . . . immortal?"

Ponceon laughed aloud. "Better than that, Winters, we made you *young!*"

"But how? What possible means could you employ?"

"It is simple. Even in your day it would have been simple—tedious perhaps, to work out, but simple in theory. We hybridized your cells."

"What do you mean?"

"Do you understand biology at all?"

"I did in my own day—what was then known."

"You know then that a race of cells or of any protoplasmic life tends to thin and die out after a certain length of time? It is usually accompanied by—or measured by—the amount of inorganic matter in the physical content. You also know—for it is an ancient principle—that to infuse new life into the old is to cause a new hybrid race to start, a young race with a full life-cycle before it."

Winters frowned reflectively. Then he nodded.

"There are two hundred and seventy species of cells in the body of types sufficiently differentiated to stand systematic classification. In this laboratory we have cultures of every one of them growing in test tubes. All we did to you and to Pondero was to insert in its proper place in your bodies a small particle of each of the two hundred and seventy types of cellular tissue. Nature has done the rest and your entire body is now made up of new, fresh, vigorous cells. I said it was simple!" And he looked smilingly around at his companions.

"Great Heavens! And when we once more become old . . ."

"We do it again!"

Winters pondered the miracle in silence during the next day or two, which Ponceon forced him to spend quietly. He tested his body soberly and with an open mind, in spite of that unmistakable thrill of youth which coursed through his veins and bade him doubt no further. But he was finally convinced of his rejuvenation and on the next day rose briskly almost at dawn and dressed in the cool silk-like clothes that that had been provided for him. Then he ate breakfast from the automatic food purveyor and, full of vigor, entered the laboratory where Ponceon was at work this early over his test tubes. Winters had made up his mind.

"I am going to go back to school," he announced. "You have given me new life and—why there's no reason against it!—I shall proceed to learn everything known to science. Why should I not begin here?"

Ponceon nodded thoughtfully. "It has all sorts of complications, this business of immortality. If you will give me three or four hours a day help here, I will direct your study of world conditions. We have a good library of records here. But there's a deal of work to be finished on our rejuvenation operation before we can call it complete."

"But it worked on myself and Pondero."

"I know—but you are both still under observation. Perhaps something will go wrong. Your teeth, for instance, should be examined. Perhaps we shall pull them out and try grafting gum-nail tissue on your gums. Also in the laboratory technic we have trouble with the germ culture for several cell types. That will take time and work—a month of it or more."

And so Winters went back to school and made mistakes and learned much therefrom. In off times he sat by the hour in the library looking and listening the records science, history, travelogues and philosophy. At the end of two weeks of study he set down tentatively on paper a brief resume of the course of human progress during the past fifty centuries.

At his last awakening he had found a world ruled by individualism carried to extremes. Almost no social or racial consciousness had then existed. "Today," he wrote, "a curious fact is apparent. Each man realizes and shares in the united attack by mankind upon the unknown. Each man controls his actions and his efforts toward the common good and refrains from infringing upon his neighbor's liberty. Yet all this is accomplished by education and codes of ethics rather than by laws or compulsion.

"In 20,000 A. D. efforts were ruthlessly self-centered. Shortly thereafter commenced a remarkable period of group action by the weak against the strong. Such a reaction was inevitable, as was its success. By 21,000 A. D. a system of voluntary social agreements had been established and, although there seems to have been a number of individuals who refused to participate, the concerted group action of the majority soon began to bear material advantages. New knowledge and invention was perfected and only shared among the society members and thus, slowly enough in time, the society of individuals came to include the entire human race.

"The agreement was a simple one: to force no man against his will and to never refuse help to any man—these seem to be the two most important and, indeed, the only vital agreements. So sensible and beneficial an arrangement was quickly perfected in its details, leaving no room for laws or complications. By the year 22,000 the social contract was so thoroughly established that the imagination of man has not in five centuries put forth a proposal to change it in any way. Under it science thrived by enormous strides. The population increased steadily until it was found desirable to set up colonies on Mars and Venus which

are now fairly densely populated. (Rocket liners ply daily throughout the solar system and accidents are no more prevalent than in the twentieth century upon the seas of Earth. The journey, with atomic power, requires less than two weeks to Mars and about ten days to Venus.)

"Earth has a population of some one billion people. They are housed in congenial groups of anything from two to two thousand and are scattered impartially over the face of the globe, for artificial climate is maintained in all buildings on Earth, just as it is on Mars or in the rocket ships that ply through space. There is no barter or trade, for every group has a production machine capable of turning any given raw material into any desired product. There is a sort of trade or exchange in the products of the mind. These are not sold for money or position, of course, but upon the importance of a worker's inventions depends the willingness of others to help him in the event he undertakes a project that requires many assistants."

Here Winters stopped and read over what he had written. Even to put it on paper set him aflame with impatience to go and explore this new and wonderful world. But he had promised to help in the laboratory until the most wonderful of all inventions was perfected. He rose and walked down the corridor.

As he came to the door of the laboratory he heard the sound of voices raised in agrument, and stopped listen. Pondero was speaking: "I should think it would be obvious, Ponceon! Here is our chance to control the destiny of the race for unselfish ends. We can preserve the few noteworthy men of genius from each generation and let the rest of the people live and die as they would naturally do. Think of it, man! After a few thousands of years we should have a population of great minds—with brains actually in the majority! Let us make immortality a reward for great work or for noteworthy accomplishment. Why should we broadcast to the entire world our discovery? What purpose would be served? Unworthy people would be preserved in their unworthiness and bad counsel and wrong principles could never be wiped out from the human mind—even by the great healer, time! It is criminal to do it!"

Fastak and Mintal nodded, convinced.

Ponceon shook his head obstinately. "It sounds plausible," he admitted, "but it must be wrong! Why? For the simple reason that we are committed to refuse help to no man. We shall be asked for information and must not refuse it. Any scheme to help mankind which includes a refusal of such help must—somewhere or somehow—be bad!"

"But there are three of us and we are all determined," put in Mintal with lowering brows, "What do you plan to do about it?"

Winters could feel the tension in the room and stepped softly through the doorway. His mind was made up—he would stick by the man who had saved him—Ponceon. But there were three strong men to be coped with. He silently gave thanks for his young strength so miraculously returned to him and eyed the laboratory equipment speculatively with a view to some possible weapon. On a table nearby was a metal rack support—a strip of steel two feet long and half an inch thick.

"I shall announce our discovery, giving full details, today!"

"You can't do it, Ponceon! I tell you it would be throwing away the greatest opportunity for good ever offered in history!"

"And I say that, as you know, we are bound by the social contract to benefit the world by our work. We cannot pick and choose those whom we are to help!"

"That is just what we shall do!" exclaimed Mintal savagely. "I cannot understand why such a simple thing fails to appeal to you!"

"Simple! Are *you* willing to assume the task of choosing those who are to live forever and those who must die?"

"Why . . . er . . . I wouldn't have to! We could appoint a committee and let their findings be scientifically determined."

"Who would pick the committee?"

Winters had edged his way unobtrusively over to the table and his right hand, behind his back, had firm hold of the bar of steel. He tried to catch Ponceon's eye, but that young person was heatedly gesturing his argument into the outthrust face of Mintal. Winters had seen plenty of fights in his day and knew what to expect. It could not be very many minutes more, he felt, before a blow was struck and his hand tightened on its weapon and his eye measured the distance to Ponder's head.

"Stop a moment," cried that huge one. "How far will you go with us in the matter, Ponceon? Will you hold back your announcement until you are asked by someone for the information? What I mean is, would you be willing to let us go ahead for the present—operating only upon old men of known worth and intelligence? Then if someone hears about the operation and *asks* you, we could grant him the secret on condition that he keep it to himself. Now surely that's not too much to ask!"

"It sounds very plausible, Pondero. But it's just as wrong one way as another."

"But that would not be *refusing* help!"

"It *would* be withholding help, though. The human race is under sentence of death, individually speaking. We live out our lives, waiting for the stroke of fate that shall stop our being. We are in need of help that our lives may be saved. Even as I speak a hundred people die somewhere on Earth. In the next moment another hundred breathe their last. I must save them from that fate and as quickly as I can."

"For the last time, Ponceon, are you going to be sensible about this thing or not? We are three to one against you."

"The majority does not make right, Pondero. I tell you once more that I shall announce our discovery this noon!" And he shook a clenched fist under Ponder's face.

"Besides," put in Winters quietly, "It's three against *two,* if you don't mind! And I have an argument right with me!" He produced his weapon from behind his back.

"An argument!" said Fastak, frowning. "I don't understand."

The others also looked puzzled. Winters began to wonder if he could possibly have overestimated the value of human strength. Perhaps these supermen of the two hundred and fiftieth century had powerful weapons concealed on their persons.

"I shall use this argument of steel on the man who interferes with Ponceon!" he said stoutly.

The four men stared at him in surprise. Then Mintal's satanic face worked furiously and his shoulders moved convulsively. Winters half raised his bar, expecting attack, when Fastak's roar of laughter cut the tension of the room flatly. The other three joined him—even Ponceon. He, indeed, doubled up with mirth, gasped out: "Oh Winters! What a quaint prehistoric notion! Did you—ha, ha!—did you think they were—oh, this will kill me!—you thought they would *strike* me!"

In great confusion of mind and with scarlet cheeks, Winters stammered out his apologies. They paid no attention whatsoever to him. As silently as he had entered he left the laboratory and shut himself up in his room. About noon he came out and went once more to the laboratory, to find the four gathered in front of a flat board set with instruments.

"I warn you, you will regret this, Ponceon!" said Pondero in a severe voice. But Ponceon calmly and steadily complete his preparations and in a clear firm voice proceeded to make the announcement to the world that has since become considered a classic in the annals of human history. And Fastak, Mintal and Pondero stood by frowningly as first, but as the inquiries began to come in over the receiving vi-scope and congratulations and excited applications for treatment filled every recording

spool in the laboratory, their brows became smooth and they joined in the thrilling work of humanity's repreive from its age-old enemy—death.

And now the quiet little laboratory became the scene of mass colonization. Within an hour ten thousand airships had landed and vi-glass housing structures were commencing to rise. By the next day a city of half a million inhabitants was in existence and biologists thronged the laboratories and the great labor began. In all this Winters was left almost entirely to himself and walked about examining and studying people and things with great interest. About the third day he found Fastak and Mintal in a recreation room talking to a group of attractive young girls and they called him in.

They had turned over all the information needed for such a simple process to competent assistants and were now bent on enjoying a social life for a time, they told him. Why not join them?

"Where is Ponceon?"

"He was here a while back—but he has gone off to live with Mardia a few days. He'll be back tomorrow, perhaps."

Winters was not shocked at the very casual sexual relationship. Indeed, he was quite prepared to find these people of the future taking one biological need as calmly and as sanely as any other. During the course of his life thereafter he contracted many such temporary liaisons himself. The hunger of sex was considered no way different from the hunger for food—except that the latter more frequently interrupted one's regular occupations.

Upon this occasion, however, he was consumed with impatience and eagerness to see the world and mentioned this to Fastak.

That young worthy laughed. "Take an airship," he said. "You'll find many of them outside that belong to no one in particular."

Winters walked to the edge of the city and passed through an airlock now open due to the mild weather. A young man standing nearby was only too flattered to show the famous Winters how to operate the simple mechanism and assured him that "if anything happened almost anyone would help him out of his troubles."

III

AND SO THE ANCIENT AND YET YOUTHFUL WINTERS set off for a month's cruise during which he haphazardly circumnavi-

gated the globe. When he was hungry or thirsty a push on a button produced food and drink. When the fuel dial showed red (as it did once over the Indian Ocean) he descended to the surface of the water and pulled the intake lever, whereupon the suction tanks filled themselves with enough brine to keep the atomic motors running powerfully for a month. When he wished to sleep he landed his ship and stretched out on the bunk at the back of the cabin.

He visited some large cities and found everyone excited over the prospect of human immortality. No old people were left anywhere, for these had all proceeded to the laboratory near Lake Superior to restore their youth. But the young men and women were revising their entire mental outlook upon a larger scale. No longer was there a problem about "what to do with one's life." Life could – barring accidental injuries – continue forever. Therefore each person was proceeding to do whatever he or she happened to want at the moment. He found one man contemplating the idea of breeding dwarf humans and selecting for dwarfness generation after generation until he had beings of microscopic size. "It might take a million years – or ten million," said this calm dreamer. "What difference does time make now?"

On an island in the South Seas he found a small group of five people. They had been doing some desultory research in physics but had abandoned it for the sake of "a few hundred years of loafing under the sun down on the beach."

In western America he found a glass building that housed one dreamy-eyed mathematician. He had abandoned all other tasks for the ethereal joy of producing *pi* to infinity. "Probably you know *pi* to its fifth decimal – 3.14159," he told Winters. "It has been carried by previous workers to its ninety-fifth decimal, but the work is time-consuming in the extreme. I have decided to devote eternity to it."

"But supposing it comes out an even number in one of your later calculations?"

His eyes brightened. "It's fascinating to think about, isn't it? Will it ever come out even or is it an absolute prime! That's the question!" And he turned to his figuring in a fury of concentration as Winters left him.

But the real excitement was reserved for his return to the research laboratory. This he found much smaller than it had been, for the work had (very sensibly) been decentralized. A few thousand people remained, however. Ponceon and Pondero welcomed Winters back enthusiastically.

"Now that you have explored this world," said Pondero, "how would you like a cruise of five or six hundred years through space?"

"What do you mean?"

"Why, that the human race is no longer confined to this little solar system. It is many light years' travel to the nearest star and would require hundreds of years in our fastest rocket ships. But *now* the voyage is entirely possible. There are dozens of expeditions planned and Ponceon and I are setting off next week. Want to come?"

"But your food?"

"Food!" exclaimed Ponceon. "Food, water and other neccessities are simple. In an airtight test-chamber the processes of life continue without loss of one single milligram of matter. Our machines turn any given substance into any needed article. We merely use matter over and over again. A slight loss is experienced in providing energy — but a few tons of sand will keep us alive for millennia. And as for fuel — another few tons in the atomic repulse engines will give us more speed than we dare use."

Winters accepted enthusiastically and set earnestly to work to learn the rudiments of that science which so miraculously had conquered nature's secrets. A week later he sat bewildered on a steel-sprung seat in a great vi-glass sphere and watched Earth sink rapidly away below him. In a week they landed at the edge of a great glass covered valley on Mars and he marvelled at the earthly, homely appearance of everything inside the glass as contrasted with the red wastes of desolate sand so grotesquely stretched to the horizon under the dark blue Martian sky.

A week of sight-seeing (for Ponceon had never visited Mars) and then the journey was resumed. Day after day slipped by — Ponceon and Pondero finding their chief interest in Winter's earnest struggle to acquire a hundred centuries of learning in one gulp. But after a month had gone by the routine of the ship settled into a dull rut and after a year Winters came to really know something of modern science. There were (they calculated) two hundred years more to be passed before their goal was even approached. So it came about that they all three took a leaf from Winters' personal experience and erected a leadlined chamber in the center of their sphere. They constructed a clock based on light intensities that would awake them whenever they approached a star even remotely.

Then Ponceon prepared drugs and they entered their ray-screened chamber and slept. On through space for a century and a half sped a lifeless globe and at the appointed time they awoke, painfully restored their wasted tissues with days of medication and exercise, and looked

out upon the looming brightness of a minor star too dim to have ever been recorded on earthly telescopes. It was in the red dwarf stage and ancient beyond all computation. Eager eyed they swept space for a sight of possible planets, but in vain. Then on past the hoary sun into dayless space once more.

But why attempt the impossible? To describe infinity requires an infinity of time. They slept and awoke and traveled on into this mystic maze of matter we call the Universe. They found one giant star around which swung a huge cheerless world of bare frozen lava—smooth and lifeless. On this they landed and tore ten tons of rocky fuel from an unknown hillside to send them still farther on their way. They slowly grew old with the passing of the years and operated upon each other all one timeless week and became young again. And since no children were born to replace old men and women, the population of Earth remained almost fixed.

We can no more accompany them upon their interminable travels and adventures, reader, than emulate their adventurous example. Out fromEarth there shot a thousand such exploration parties every century until one would wonder that space was not filled with them. Presently stars were found which were encircled by habitable planets and on these colonies were formed and this disease of worlds that we call life spread over the surfaces of spatial bodies in all directions from Earth—the great center of infection. Five thousand years passed and many of the same people still lived and pressed their quest into space.

A few were killed in accidents now and then, to be sure, and once in a while a new disease would crop up and some few unfortunates would die before science could find a specific cure. Ten thousand years passed and billions upon billions of men and women thronged the planetary stars. On went life—never ceasing—never satisfied. And with it went Winters, still eager-eyed and impatient as ever to learn one more fact and accomplish one more task.

Once, on a return visit to Earth he saw a face vaguely familar. Where had he seen that slight form with its almost ebony skin and that apprehensive inquisitive, face? Surely it could not be . . . it was Bengue! He greeted him cordially and learned that Bengue had imitated his example and escaped by sleep from the threat of the vengeful Hargy; that he had awakened a few months after Winters had left Earth and had been actively engaged in breeding experiments ever since. The two spent half a year together and finding that they had nothing of real interest in common, separated by mutual consent.

Word came back to Winters on a planet on the very edge of that void which rims the Universe, that Ponceon—the great discoverer and liberator of Mankind—had been killed in a rocket accident and Winters mourned the passing of an old friend. This was in the year 50,008, two years before the discovery of projection rays. *That* changed the course of history in very fact! To wield power at a distance of a thousand light years! Of course, it used up raw material at a wholesale rate, but it gave these insignificant human animals such a Godlike sense of power to be able to juggle with the very stars in their courses. And the damage done was not—in comparison to the scale of cosmos—more than a flea-bite on a Brontosaurian lizard.

But one final scene, for after all it is the idea—not the detail—that makes life worth its living. Shortly after the turn of the hundred thousandth century. Winters revisited Earth and gazed in awe at the reddish sun that marked off the days of a dying planet. Not more than ten thousand souls now dwelt upon its surface and Winters was filled with a sense of sadness at the changes wrought in the familiar scenes. On a mountain top in Africa he talked with an old man, gray-bearded and feeble with age.

"I shall never undergo the youth-process again," he said. "I am old and presently I shall die and be no more."

"If you were young you would be full of hope and energy and not wish to die," replied Winters.

"I shall die because life has nothing to offer me."

"Oh I know what you will say" (he continued). " Food and love and adventure are all very well. They titivate the senses—nothing more. Though we humans have grown in importance, we are insignificant atoms measured in the scale of Creation. There is nothing we can do that is really important. Suppose we increase human stature until we stride about using the stars for footstools—mere size does not add to our importance. I do not eat unless I am hungry. I undertake no action unless it is for a definite and reasonable purpose. I can see no purpose in life—so I refuse to be so absurd as to continue living!"

"But one thing you omit—why not devote your life to solving its secret? Try and find the reason or purpose for existence! "

The old man shook his wintry head emphatically. "I once had a friend who made that resolution. He set off . . . oh, thirty thousand years ago . . . for a secluded planet at the edge of the universe in the direction of Alpha Centauri where he planned to conduct research upon the subject. His name was Condonal. I have never heard of him since."

Winters, vaguely saddened, determined to leave Earth and set off alone through space. He found himself growing more and more unsatisfied with life and all that it meant. After all, what possible purpose *could* it serve? After a year's lonely cruising he determined to make a search for the man called Condonal. His adventures would fill all the books in all the libraries of the world. He came at last, upon the report of a dark-haired woman with whom he had lived half a month, to a blue-white sun about which circled one lone planet scarce a thousand miles in diameter. Here, she had heard, dwelt Condonal and here he had been for many thousands of years. Many men and women had come to visit him, she understood, and most of them had remained as his disciples.

Winters felt a curious sense of novelty and youth as he swung his spaceship down and cruised over the face of the green and silver world below. Eagerly he peered for signs of habitation, but in vain. Then he noticed that the world did not turn on its axis, but remained with one face forever fixed toward its life-giving sun. Near the equator and at the very edge of the day-line he found at last a great building with an enormous white dome that thrust above the green foliage. He brought his vessel to a rest on the soft earth in the midst of a group of low structures that surrounded the central tower.

As he stepped out and felt smooth grass beneath his feet he experienced a delightful sense of freshness—the air was different from any he had ever breathed. A light breeze blew from the night country behind him, cool and delicious and smelling faintly of melted snow. In this place it was always spring and always morning. No one came to meet him, but he stood there alone with a feeling of familiarity, as though he had at last come home. Trees cast great long shadows across sap-green lawns and his memory went back to the days of his childhood and early rambles through the tingling dew of barefoot summers. He felt wonder well up in him and made his way toward the nearest building.

At the door a man greeted him calmly, offering shelter and food. "I have come, if I can find him, to speak to a man called Condonal."

The man nodded as though he had expected the request. "The Master is free for the next hour, when he is due at the Temple," he said. "I will take you to him."

Winters was led to a building of gray stone close beside the huge dome that dominated the scene and was ushered through an open doorway into a large room. The light was dim after the bright sunshine and it was a few seconds before he made out the youthful figure seated in a huge chair in the center of the room.

"What do you seek?" asked Condonal—and his voice was deep and quiet like an organ tone. Then Winters told him of his search and its purpose and he nodded understandingly.

"You are welcome here," he replied. "Our community is made up of searchers. What purpose has life? That is our problem in research and we shall solve it!"

"But what possible solution can there be?"

"We do not know even that—on the face of things there seems to be none. Stars are born; wax great; diminish and die. Throughout infinity—universe after universe—the process goes on. What is will one day not be and on still another day again exists. We have pursued every phase of science to its last ultimate datum and found no purpose in creation. Our reason plunges forward and searches every possibility of the future and fails to find any basis upon which to erect the least speculative structure. Life is not a reasonable thing, perhaps."

"You have come to that conclusion?" cried Winters sadly.

The deepest eyes twinkled sanely. Condonal nodded. Then he held up his hand and his dark, lean face lighted with purpose.

"But nevertheless our research is sure and we *will* discover the secret," he smiled. Winters' frown of bewilderment amused him. "The answer lies in evolution."

"But we have been experimenting for a hundred thousand years!"

"And we have failed; I know! We have been on the wrong track. We have tried to evolve the human animal into some finer type. That is a waste of time."

"But . . . I don't understand."

"Yet it is plain enough. The human animal has achieved a new plane of existence called *reason.* Very well. This reason of his asks a question which it is unable to answer. Consider a moment how this reasoning ability came into existence. We will start with first life—one-celled jelly-like creatures in a pond. Could they reason? Then we will consider the structure of human body. What forms its tissues? Nothing but specialized forms of these same one-celled primitive organisms! Can your muscle tissue reason? Yet each cell of its lives and eats and reacts to its environment and, eventually, dies. It cannot reason, but its willingness to cooperate with a billion billion other cells makes possible a human being who *can* reason. Now do you see?"

"I'm afraid . . . well, I do seem to have a faint glimmering."

"But it is so simple! The cooperation of animals makes possible a new thing in creation—*thought.* What would result from the cooperation

of thoughts? Why not another new departure—a super-thinking—an understanding—an ultra-physical Being who shall be capable of reason as far above our mental merry-go-rounds as we, in turn, are above the elementary tropisms of bacilli?"

"But . . . what good would that do us? It is we ourselves who wish an answer to life's riddle."

"And when He is created, will He not tell us?"

"Hmm! . . . You used our body cells for your analogy. Did you ever think of thanking them for their creation of your body? Did you ever try to explain to them what reason is?"

Condonal laughed cheerfully. "You are an apt pupil! But answer me this: how many hours have been spent by our biologists in human history examining into the lives of our body cells; learning how to help them; striving to improve their condition?"

Winters nodded. "It is a point," he conceded.

"And we have found them incapable of understanding, have we not? If we had found them to be little creatures capable of speech and reason would we not joyfully have commenced their education—for our own sake, if not for theirs?"

"Oh, ho! And you think that your super-animal will . . . "

"Of course! When He looks around Him and begins to inquire into the reasons of His own existence He will find us. He will study us and marvel and without question will inform us how to act so as to help Him and His own evolution. And *then* . . . ah! . . . Then He will search out the secret of life and tell us. Perhaps we will not be able to understand, but we will at least have the opportunity."

Winters was excitedly pacing the floor, engrossed by the bold conception. "Even if we do not understand—we will at least know that there *is* a purpose and that knowledge in itself is all that we need."

"But we have not yet had that assurance," reminded Condonal smiling. "Much remains to be done. I must now go to the temple."

Winters followed his stately progress humbly and hopefully. At the temple Condonal left him and he made his way through the main doorway and entered the vast cavern of the building. From above poured a deep purple light like a velvet hanging and shone sombrely upon a thousand quiet figures seated in black chairs. Three hundred feet above stretched the great dome, many-windowed and mysterious, and here and there on the walls Winters saw little cages in which men tended banks of instrument boards.

They seemed very far away and unimportant in the dim light. Winters found himself tingling gently all over the back of his neck. Three other persons stood beside him in the doorway and presently one of the figures seated in the body of the great hall stirred quietly and rose, whereupon one of those waiting walked softly forward and took his place, while he made his way out toward the sunshine.

As he passed him Winters studied his face curiously. It was pale as faces normally went — being olive brown — and an expression of utmost peace and placidity rested on the shapely features. Presently more people arrived at the doorway and stood quietly waiting. Two more exchanges were made and then a fourth sitter rose from his place and Winters impelled by the expectant glances beside him, walked forward and sat down in the chair.

The back was shaped to fit his body and two soft pads pressed against the base of his brain. Instantly he felt a great current of emotion sweep through him — vast and inexpressible. He caught vaguely the current of some deep underlying meaning that surged and changed in pattern. But more than that was the calm sense of *right* — as though this particular place was where he belonged and as though some definite object was being accomplished here. It was the spirit of cooperation in its abstract non-material form. A great and peaceful joy came into his body and made him unaccountably happy and tender. Tears welled into his eyes.

But presently he felt one touch him on the soulder and looked up at a kind face which said "Your mind is not yet disciplined. You must first study the ritual. You are not co-operating." And he rose to find a dark-skinned woman in white robes waiting to take his place. In a sort of drunken ectasy Winters left the Temple and wandered thoughtfully out into the eternal morning sunlight that poured peacefully on the soft landscape. His mind was filled with new vague thoughts that eluded systematic pursuit provokingly. After an hour he found himself back at the temple. With the nameless impressions more deeply registered upon his mind, he would then be able to classify them and think clearly. But he was stopped smilingly at the door and told to first learn the ritual.

The next week he spent receiving instruction in the simple forms and orders of thought and was admitted once again to the Temple and again came out more certain than ever that the vague and nameless thoughts which coursed through his brain needed only another period of contemplation. And again, after a few hours of walking he returned to the Temple for new inspiration.

Some weeks later he went to speak to Condonal.

"When primitive one-celled animals began to first co-operate," he said to the Master, "they did not at once form a Man."

"True."

" They formed first some low form water animal which was not able to reason. Reason did not come for millions of years — not until the form and arrangement of the cells had been changed and again changed countless times."

"You have gone far in a short time, Winters."

"Should there not be other temples set up — many of them — each working with a different ritual? Might there thus be more chance of our hitting upon the proper form of cooperative thinking which could produce our Being of super-thought?"

"We are testing our ritual constantly. Already the instruments set in and about the temple have recorded interesting phenomena: unusual changes in electric potential; a tendency to ionization of air; a shift of the spectrum toward the blue. What these phenomena mean we do not yet know."

"How many are needed to start a temple?"

"The more, the better it seems. But a few hundred should produce results."

"If a group gathered a few hundred miles away would it affect your experiments here?"

"If it did, that in itself would be remarkable and worth trying."

"And another thing, sir. The word of what we do here should be sent broadcast through the Universe. By chance I found you — millions would like to. Can messengers not be sent out?"

Condonal nodded thoughtfully. Within a week the word began spreading through the star-systems and within a year a dozen temples were building on the planet of eternal dawn.

Within a century the Temples of Thought were numberless throughout the Universe and its cult absorbed the attentions of half the human race. Winters took his part in the ritual of a temple built on a mountain-top not far from Condonal. And now day after day, century after century, millennium after millennium he spends his time and energy upon the problem. Always the green sun sends its pearly radiance over the land and when he walks thoughtfully to ghe night side of the mountain he gazes upon an empty sky, black with sheer nothingness — for here the universe ends and beyond lies nothing.

With a telescope more stars can be seen — far distant universes unbelievably remote. Traversing this space are spaceships — ever questing —

on voyages that last hundreds of thousands of years. On through space spreads the cult of the Thought-Temple. New forms and rituals are tried and improved upon constantly. New and unreadable phenomena are recorded on the instrument panels.

And ever and again Winters comes out from the Temple full to the soul with thoughts and feelings ever fresh and new and gazes wonderingly upon creation with eyes that are almost, but not quite, opened to its inner meaning.

Here we must leave him. Immortality is not yet ours, nor can our minds anticipate what lies beyond reason. Yet we can imagine the tools with which the last secret might be wrung from a jealous Nature. And as Winters pointed out to Condonal in one of their frequent discussions: "If this means fail to solve the problem, yet the idea does not neccessarily fail with it. For if Reason be life in the second degree, and the super-thought we seek be life in the third degree, then nothing prevents an evolution of third degree Beings and their co-operation in the creation of a fourth-degree Creature."

"He may be pure Energy," suggested Condonal.

"Or the essence of Life itself," replied Winters, his pale face gleaming as though lighted from within by some hidden dream. He was thinking of the countless billions of human beings who had lived and died on a distant planet. He was wishing that some means might exist of telling those tragic figures of these new hopes and joys. Would it still that despairing cry of "Why? Why?" that rose from a million rattling throats on the fields of Flanders? Would it heal the broken heart of the man he had known in his youth at New York who after forty years of drudgery in an office realized one day that he had grown old before he had found time to do anything with his life and had, after a week's dark brooding, committed suicide? His thought cast back over millennia—as readily and surely as it could wing its way through into the future. For what wall can bar thought?

How it reached me, I do not know. That it has reached me this story proves. Not, perhaps, in unadulterated form—for my own prejudices and rationalizings have stamped it into a form and meaning comprehensible to my twentieth century brain. I cannot even be certain that it is true in its entirety—but parts of it, I promise you, will one day come to pass. And in the meantime, let us, with the immortal Voltaire, "cultivate our garden."

Editorial

Why Bother With Criticism?

by ROBERT A. W. LOWNDES

WRITERS WRITE AND READERS READ for a wide variety of reasons, and even when we are concerned primarily with pleasure, as we are here, the range is a very wide one. It makes much more sense, I think, to consider this range horizontally—from narrow to broad, realitively speaking—than vertically—from high to low. For one thing, it is possible to cut down a good deal of the vanity and moralizing and exclusiveness that enters automatically into categorizing something as "higher" and "lower" in relation to something else, if we look at horizontal rather than vertical ranges. The element can't be eliminated entirely, of course; no system of judgment that I can think of will entirely exclude vanity and self-righteousness. We all want to think that we are right and good. We all want to think that there is something wrong with the other fellow if he does not see things the way we do—particularly if he spurns what we have found good, or praises what we have found bad.

And the element of criticism enters the moment we start talking about a story that we have read and encounter a difference of opinion—or the moment we stop to wonder *why* this story seemed good to us and that story not so good, or positively bad. So long as we are satisfied, and everyone agrees with us, though, there is no need for criticism at all.

There are a number of science fiction lovers who feel not so much that science fiction is beyond criticism, but rather that literary and other standards, which they are perfectly ready to apply to mainstream fiction, are or ought to be irrelevant. They read science fiction, they say, for fun; and they do not want to think about science fiction, as an art form, beyond the simple "I liked this—I didn't like that" level.

There's nothing wicked about such an attitude. There's nothing stupid about it. It's neither wicked nor stupid to set limits on the range of how you want to think or feel about science fiction; and in so doing you will, indeed, protect an area of pleasure for yourself—until and unless the evil day cometh, when you say to yourself, "I find no pleasure in it." (And there's no guarantee either that the day will not come, or that it would not have come had you not so restricted yourself.)

Trying to impose this attitude on someone else, or trying to prevent someone else from using a wider range, is another matter. This is foolishness, which, if persisted in, becomes stupidity. (Stupidity is not ignorance but the inability to learn—either through lack of capacity, or by deliberate choice. Some of the most stupid people, in some ways, are often the most learned, so far as the amount of information they have absorbed goes.)

The reader who prefers to keep science fiction within a narrow range of simple "like" or "not like" is, then, behaving within his rights, and need not bother with criticism. And such a reader is not likely to be upset by the activities of others who prefer broader ranges so long as he himself avoids criticism—that is, avoids reading criticism and expressing value judgments on what he has read, beyond the simple like-dislike range, and never mind why.

The trouble is that we are surrounded by value judgments on a vertical as well as a horizontal level. Generally speaking, we are introduced to almost any art in our early days in a manner which tends to confuse art and duty. We are told that we *ought* to appreciate the "best" and avoid the inferior or the "worst". And while some works of fiction which we consider science fiction are often included in "high" categories (I was introduced to H. G. Wells by a teacher), *general* attitudes of teachers, parents, and other authorities rate science fiction as rather low entertainment.

Which, unless we are capable of ignoring such attitudes, leads us into criticism, willy-nilly. When someone proclaims that something you have enjoyed is inferior, or downright trash, the chances are that you will want to defend it. Because *if* something you enjoyed (and therefore found good) is proclaimed to be inferior or bad, *then* there is an implication that you are a person who enjoys the inferior, enjoys trash—so there must be something wrong with *you.* If you are secure enough in your own estimation of your worth as a person so that you can simply shrug off such implications, if you realize that there is nothing wicked or stupid or otherwise wrong with enjoying something which someone else (or

even a majority) of other people consider inferior or trash, then you might even be able to acknowledge that a particular story you like is not great art, according to the standards of great art, and let it go at that. Or others might be wrong, but your own security will not require you to produce defensive reactions. It is the insecure person, who has serious doubts about himself, who has to be excessively defensive (often aggressive in manner), under such conditions.

Art, as C. S. Lewis notes in his book, *Experiment in Criticism*, is not duty.

But an awful lot of people are confused on this subject. And a great deal of criticism is a concealed (and often not very artfully concealed) means of proclaiming duty in relation to art, or some work of art (which includes fiction) as well as saying, "I have a system which shows that *your* standards are inferior. What *you* enjoy is worthless."

This is such an ubiquitous attitude, that I do not wonder that many people have little use or patience with criticism. Yet, this is the corruption of criticism; the counterfeit of it; and the abuse of any thing does not impeach its proper use.

There's only one "proper" reason for bothering with criticism at all, and only one really intelligent motive for caring about it: to increase pleasure by broadening one's range of perception and increasing one's sensitivity; in short—mind-expansion.

Genuine criticism is concerned with the whats, the hows, and the whys, followed by value judgments—which will always be relative, not absolute. And these judgments will be concerned with the critic's vertical estimates of worth—also again, relative and not absolute—which may affect the broadness of your range of pleasure, as well as the intensity of pleasure in any particular story, whatever its range.

Criticism worth reading, then, can tell you first what a story is about in the sense of what is there on the page; it can tell you how the author goes about doing what he has done; it can tell you something about why the author did this, rather than something else; and it can suggest through all this what the range of the story is, and the level of intensity wherein you may find pleasure in reading it. Please note that I have said "can do" not *does*. A work of criticism—the real variety, not the counterfeit, and particularly not what most people mean when they say "constructive criticism"—has potentiality in all of these elements. It will not be complete in any of them, and only you yourself can discover what it does for you—which may be what it has done for someone else, or may not be at all.

There is no reason, repeat, why you *should* broaden your range and increase your (potential) pleasure in science fiction by applying to it the standards that are applied to what are generally considered the great works of mainstream fiction. And the report I can give you of my own experience in reading does not guarantee that you will find the same: it only suggests a possibility which may become a fact with you.

I started reading science fiction, fantasy, weird tales, when in High School, and at a time when I had very little equipment to judge the range of anything I read outside of simple categorizing and like-dislike statements. I received intense pleasure from many stories in the old magazines: *AMAZING STORIES, AMAZING STORIES QUARTERLY, SCIENCE WONDER STORIES, AIR WONDER STORIES, SCIENCE WONDER QUARTERLY, WONDER STORIES, WONDER STORIES QUARTERLY, ASTOUNDING STORIES* (I did not like *ASTOUNDING STORIES OF SUPER SCIENCE,* at first, for the most part), *WEIRD TALES* and *STRANGE TALES.* Criticism of these magazines bothered me, both because of the status it seemed to confer upon me (low) and through fear that it would spoil my pleasure in reading science fiction, etc.

In the mid-50's, when I owned a house and thus had the space to store a large collection of magazines, I managed to gather a run of these old issues which I had read back in the 30's and started to re-read them. By that time, my range of reading was much broader, and I had absorbed something of critical standards—at first, I must confess, for the sake of status, although it was not long before I found the rewards so great in extending my range and intensifying pleasure that I got to care very little for the status involved; it's convenient at times, that's about all. I started to re-read these old magazines, in chronological order, and am still doing so.

The particular intensity of pleasure that I derived when a teen-ager is not repeatable; but I have found that this is replaceable by a different sort of pleasure. A few of the stories which were favorites at the time no longer delight me; and a few of the stories which I did not care for at the time now seem rather enjoyable. But for the most part, they come out either positive or negative pretty much the way they did before—no better, no worse.

In between the readings in the 30's and current re-readings, there have been periods of revulsion where I did not want to read science fiction at all; but these had to do with my own personal emotional state, and not with the stories themselves.

Awareness of the limitations of *The Warlord of Mars,* which I did not have in 1930, did not prevent my enjoyment when I re-read it in the late 50's. Nor will it, I think, inhibit pleasure in re-reading again if circumstances allow. But because I have bothered with criticism (however painful at times) my range of reading pleasure has been greatly increased, without closing me off from pleasures in a narrower range. *The Warlord of Mars* no longer *has* to be so great as it had to be then, when I felt defensive about it.

It took work, and experience in living, to earn my right of pleasure in a number of the great works of fiction throughout the ages, as they are known. This helped me to broaden my range of pleasure within science fiction, too, for even though the field is limited in a sense, the range is still very broad. I did not actually read Wells' *The War of the Worlds* until some time around the 50s, though I read a great deal of Wells in the 30s; but re-reading the complaints about it (dull, tedious, drawn-out) that appeared in the Discussions section of *AMAZING STORIES* in 1927, 28, etc., I can understand why these readers were disappointed and do not doubt that I would have found a great deal of the story tiresome had I read it at the time I read Wells's complete short stories. And I remember now that some of the short stories did not strike me as being awfully exciting, although they gave me the first stirrings of appreciation about how well a story can be written even when nothing much seems to happen in it. And I remember my let-down feeling the first time I read *When The Sleeper Wakes,* which could not have been any later than 1930—an awful lot of it was miles over my head; I did not have any background understanding of politics or sociology, etc.

But this I have found: if you want to enjoy art that goes beyond the level of Instant Excitement, you have to earn the right by working at it. Again, it's not a duty; there's no point at all in doing it unless you want to and have some sort of inkling that it's really worth the trouble. Reading some criticism helped to suggest to me that this or that (both inside and outside of science fiction) might be worth the effort.

What it all boils down to is that you can have what you want, but you're going to pay a price for it. If you want to bother with criticism, the initial payment may be painful, in that it may seem to be destructive of what you have found pleasurable up to then. You may find yourself going through a period of sheer snobbery, perhaps, when everything you enjoyed last year, or some earlier year, now seems juvenile or worthless. But eventually, things will fall into place—if you keep

going, that is, rather than letting yourself get stuck at the snobbery level; then a sense of proportion will ensue, and what you have loved well will remain. You will find, as I did, that it is possible to find novels like *War With The Newts, Childhood's End,* and *Mission Of Gravity* (three which I myself just got around to for the first time) even more exciting than anything in Burroughs—without having to throw John Carter into the discard. Burroughs is lesser, narrower; but to use a height metaphor, the highest cannot stand without the lowest.

Many people are content to save themselves this pain of growth, rather than pay the price. I see no reason for blaming them. But I will not tolerate their vetoing the sensitivities of others who have earned the right to a broader range of enjoyment.

Hmm . . . think I'll have another go at *Finnegans Wake,* after I've revisited the Fu Manchu series. RAWL

The Reckoning

Only one reader expressed dislike of the cover on our 6th issue, and that for a reason individual enough to warrant mentioning: "I thought the cover too like the Martian Machine from *The War of the Worlds.*" Since both vehicles were essentially designed for the same purpose, it is no more surprising that there would be resemblances than there are resemblances between the various makes of automobiles. And it is not impossible that the design of the Martian Machines which this reader saw was influenced by the work of artist Frank R. Paul, who illustrated the Wells story in 1927, and *The Individualists* in 1933.

One reader expresses dislike of interior illustrations ("If you want illustrations, read comics."); one reader didn't "get the point" of *The Dragon-Kings;* and one wondered about the form of L. Sprague de Camp's poem. It's the Spencerian stanza, which you find in *The Faerie Queen,* and Sprague tells me it is fiendishly difficult; his admiration for Spencer has gone still higher since wrestling with that form himself.

Because our schedule requires a much earlier closing than before, we find that there has not been enough time for a fair number of you to vote on the stories. Thus we shall postpone the story ratings until next issue.

Away From The Daily Grind

by GERALD W. PAGE

A century or so ago, the person who really wanted to Get Away From It All—like the painter, Gauguin—could escape from the irritations of over-organized society. But year by year the difficulties multiply, so that a company that offers a guaranteed service like the one described here sounds rather good. Or does it?

THE HOTEL ROOM WAS SMALL, but clean. It was furnished with a bed, a small table and two chairs that looked as old as the hotel itself. The hotel was old enough to have the kind of windows that are opened up and down on a sash and have ordinary screens on the outside.

There was a pail of ice and some water on the table, along with glasses and a bottle. Parkhurst gestured toward a chair with worn and faded brown upholstery and as Federer seated himself, Parkhurst fixed drinks.

"I realize this is a strange place to conduct important business," Parkhurst said, handing Federer a drink. "The hotel is owned by my firm. It makes an excellent cover for our activities and meeting here lessens the danger of questions being asked. You can appreciate that."

Parkhurst sat down opposite Federer and continued. "I trust you made the arrangements we discussed?"

"All of them. The investments, the transferrals—everything. And all of it covered just as you told me to. And I have $15,000 cash with me." He indicated the briefcase he had brought with him.

Parkhurst smiled and sipped his drink. "Then there's very little reason for delay."

"None that I can see."

Parkhurst seemed to consider that statement for a moment. Then, he said, "Mr. Federer, times have changed."

"Our agreement hasn't changed," Federer said, with sudden suspicion in his voice.

"Oh, no! I merely wish to point out a few facts we may have covered somewhat summarily. I want to make sure that at some future date you don't complain that you were not given the opportunity to back out."

"I don't want to back out. I want to go through with it."

"Of course. But it is a big step. In his day, Gauguin could merely become fed up with civilization and run off to the Pacific and live with no regard for the consequences. So far as I know he never went to extravagant lengths to remove the possibility of being followed. Times have changed. There are few places where a man can hide today without help; the police, his business partners, his wife—they would all attempt to find him. If he took no precautions against being found, that is. Of course," Parkhurst added, "I speak only of a man of your position and influence."

"I'm taking those precautions, aren't I? Isn't that what your organization does?"

"True. But it is important that you really want away from your life, Mr. Federer. You have responsibility and money. It is possible that your decision was arrived at merely as a reaction against the petty annoyances of your responsibilities. In which case you might not really be as convinced you want to give it all up as you think you are. For our own protection our deals must be final."

"It was your people who contacted me, Mr. Parkhurst. Your organization is so secret no one knows about its existence except your own people and your clients. I don't think you would have contacted me unless you were pretty sure I want to get away from the kind of life I'm living."

"We are reasonably sure. But you must be absolutely willing."

"Believe me, I am," Federer said with feeling. "I've lived with that woman for twelve years and each has been worse than the one before. My business partners are crooks. Oh, sure, I go along with them and I

suppose I'm not much better than they are. But at least I've got a conscience; they don't know the meaning of the word. Three years ago we pulled a deal the government would love to know about. As a result one of our competitors killed himself and we really had to pull strings to cover our end of things. We barely scraped by. Poston still brags about how we put one over on old Uncle Sam. And those so-called civic organizations—"

"You are sincere then in your desire to get away from the life you are living?"

"I certainly am."

"And you understand it will not be easy to do this."

"I paid you people as if I understand it. You'll have a hell of a time explaining how you acquired all that money from me just before I vanished."

"It isn't completely in our hands yet. We have a complex system of shifting funds from business to business and office to office. Contracts, *et cetera.* We hold a number of apparently disconnected businesses as covers. It will really take about a year to shift all the money you've put in our disposal into our coffers, so to speak. But there will be more of it, by then—interest, and so forth. You've really only invested it for us. It's quite complex."

"It's hard to believe an organization such as yours exists."

"But it does."

"I know. And I appreciate your need for secrecy. You take a man like myself—a man sick of the hypocrisy of modern society—and you fix him up somewhere else in complete secrecy. You give him a complete break with his old life. I appreciate the fact you maintain such secrecy."

"I assure you the secrecy is for our own protection. But you won't have to worry. There won't be a single mention of your name—or any reference to you for that matter—on any of our records."

"That's good. I'm anxious to get started."

"No cold feet? No backing out? Then good. Let's get on with the arrangements."

Parkhurst put his empty glass on the table as he stood up. Federer's drink was almost untouched but he put it on the table beside Parkhurst's as he rose.

"I guess the next few days will be pretty hectic," Federer said.

"Not at all. Our method is much simpler than you suppose."

"Even so . . ."

Parkhurst laughed a reassuring laugh. "Just put yourself completely in our hands. Soon you'll be away from this life you hate so much. Your wife can worry about the business. You won't have any worries at all."

"Away from the daily grind," said Federer.

"Very aptly put," Parkhurst said with some appreciation. "Now if you'll just follow me down the hall."

"Down the hall?"

"Remember..We own this hotel. We start our trip right here."

Parkhurst opened the door and led Federer down the hallway to a door at the end. He knocked on the door.

"Tell me something," Federer said. "Where do you think I'll end up? Brazil? Mexico? Switzerland? Maybe an island in the Pacific, like Gauguin?"

Parkhurst laughed. "None of those, Mr. Federer."

The door opened. Parkhurst gestured to Federer to enter. "Your trip starts here," he said.

Federer entered. The door closed, but not before Parkhurst could detect the faint odor of the chloroform that greeted Federer as he went into the room. Parkhurst left for an appointment.

When he returned to his room, he fixed himself another drink. He drank it slowly before returning to the room Federer had gone into.

There was only one man in the room. A tall, heavy man named Shaw. But there was a machine and a stove and some cabinets. Shaw was standing over a pot on the stove.

"Almost done," he said.

Parkhurst went to the back of the room where another machine waited. It was a machine designed to package things in tin cans.

"Have you arranged to send this shipment anywhere?"

"That little gourmet shop on Fourth is expecting a shipment of hash tomorrow. I thought I'd add this in. No one will know the difference."

"Didn't you read the file on him, Shaw?" snapped Parkhurst. "His wife sometimes shops there. Federer came to us to get away from her. Mix this box in with some other shipment—one that will not go so close to home."

"Okay," Shaw said. "Soon as I finish cooking him and get him canned, I'll see what else can be lined up."

"And please check the file. We mustn't send him to the wrong place."

Parkhurst turned to leave.

On his way out, he gave the huge meat grinder an affectionate slap.

The Fires Die Down

by ROBERT SILVERBERG

Here was a lovely world for colonization, and surely the natives could be dealt with without too much difficulty. But there was something very disturbing about them . . .

THE THANIAN colonizing vessel had covered nearly five hundred cubic light-years and had visited sixteen potential colony-worlds without success, before it came upon the green planet of the yellow sun. It was a small world and one located far from the main currents of galactic affairs, but by this time Commander Dorchan Ledru hardly cared about that. All that mattered was that the world was livable for Thanians.

Commander Ledru was anxious to drop off his cargo of colonists and get going back to Thane for the next batch. He was a career spaceman, who in his seventeen years on board the colonizing vessel *Dark Star* had seen the shores of half a thousand worlds and had sided in the planting of nearly ninety Thanian colonies. He was a short, compactly-built man, with the lustrous bluish-purple skin of a Thanian of the highest caste.

In Commander Ledru burned what he regarded as a sacred fire: the compulsion to travel from world to world, aiding to the best of his abilities the spread of Thanian civilization throughout the galaxies.

And now another planetfall loomed. Ledru buzzed at his control-panel and said, "Let me have the specs on this planet coming up, *hu*? "

Moments later the sheaf of papers cascaded from the slot in the wall. Ledru's nimble, nine-fingered hands scooped them up and shuffled them into a neat stack. He skimmed through the reports.

Thermocouple reading indicated livable temperature. Spectroscopic analysis showed an atmosphere composed four-fifths of nitrogen and one-fifth of oxygen, with a sprinkling of miscellaneous inert gases and other things like carbon dioxide. Not bad, Ledru thought. The planet's livability profile coincided with the standard curve to a similarity of .003. Well within the margin of tolerance, he thought, nodding over the reports.

Gravity at surface was 1.01 Thane-norm; acceptable enough! He studied the tridim photos of the world: a green planet, well forested, with capacious seas of oxidized hydrogen. It was the third planet of a system of nine. It was orbited by a solitary giant moon. There was no sign of intelligent life - though, since the photo had been made from better than a hundred planetary diameters away, this could not be held as a certainty.

But it looked like a good planet. Ledru smiled and tugged thoughtfully at the dangling wattles that fell in folds from the flesh of his throat. He felt the old excitement rising again, the thrill of bringing Thanian life to yet another world.

From planet to planet in a chain across the galaxy, like flaming jewels in some infinitely costly necklace, stretched Thanian life. It was a supreme function of life to carry itself to other worlds, Ledru thought. Which was why the Thanians were the galaxy's highest form of intelligent life.

He jabbed down on a communicator button that opened a ship-wide circuit. The forty members of his crew and the four hundred colonists carried as cargo listened as Commander Ledru said, "This is the place. Prepare for landing at once."

THE *Dark Star* hummed gently as it swung into the series of inward spirals that comprised a planetary landing orbit. Commander Ledru watched with growing pleasure as the proposed colony-world grew nearer at each swing. Thick forests became visible; choppy seas, broad and void of traffic. It was incredible, Ledru thought, finding a gem of a world like this and finding it uninhabited!

It *was* incredible . . .

The *Dark Star* stood upright in a clearing in the forest, a gleaming chrome-jacketed spear nearly a thousand feet high. Giant supporting buttresses propped it on four sides like arching naked legs.

The robot atmospheric-samplers went out first, of course. Over the screens Ledru watched the glittering little things squirreling over the grass of the new-found world, soaking in the atmosphere and sunlight and telemetering their findings back to the master control brain on F

Deck of the *Dark Star*. He waited; and in time came the report from the computer, confirming the data obtained while the ship had been in space.

The planet was livable.

Ledru smiled warmly. There was no joy greater than the one of finding a suitable planet, and extending the dominion of Thane.

His hand tightened on the communicator control lever, and his words rang out through the entire length of the great ship:

"The planet is acceptable. Disembark using Landing Procedure A."

His private phone rang, and he snatched it up.

"Yes? "

"Commander, this is Huchaq, from the scanning tower. News, sir."

"Go on, out with it! "

"We have visitors, sir. I've picked them up on the lens very clearly. They're humanoids, and they're coming through the forest toward the ship."

Commander Ledru ran a finger thoughtfully over his lipless face and sighed. Too good to be true! The planet was inhabited! "Very well," he said.

He broke contact with the scanning tower in the nose of the ship, now the uppermost point of the tail-standing vessel, and unhappily restored the ship-wide communicator circuit.

"Attention, all hands. Intelligent humanoids have been sighted approaching the ship. The previous order is temporarily suspended. Remain aboard ship until further instructions. All officers report to bridge at once, repeat *at once*."

THE PROCEDURE for colonizing worlds which already happened to be inhabited by some form of relatively intelligent life was laid down in the Manual of Operations carried on board every colonizing vessel. There were no deviations from this policy, which had been established in the earliest days of the Thanian expansion into space.

If the inhabitants of a planet were utterly primitive, pre-technological, unorganized and uncivilized, they could safely be ignored by the colonial mission. The natives in such a case would be apt to regard the Thanian visitors as god-like beings, and would in all likelihood not interfere with the development of the colony. Naturally, by the time two or three generations had passed and the colony was firmly entrenched, it would make no difference how the natives felt about the intruders in their midst.

If, on the other hand, a planet were highly civilized, with a technological culture, a population of many millions or even some billions, atomic

power, interplanetary travel—in such a case, large-scale colonization was obviously impossible. It would involve fighting a fierce war with the natives of the planet, and that would be both barbaric and expensive.

Instead, in such a case, the colonizing officer had instructions to initiate a diplomatic liaison with the planet, establishing a Thanian embassy on it and working toward some sort of economic alliance. It was the best outcome that could be hoped for; if colonization were impossible, an alliance was the next best accomplishment.

It was in the intermediate instances—such as this one—that trouble arose. On a world with some degree of civilization, but with relatively low population density and no great degree of technological advancement, it was impossible simply to establish a colony without a by-your-leave, and unthinkable to turn away rebuffed.

Rather, the colonizing officer was required by Thanian policy to attempt to achieve a diplomatic rapport, gaining permission from the natives for the Thanians to settle on their world. Failing this, the colonists were simply to crush the natives by force of arms and establish a settlement anyway. This drastic step was to be avoided, if at all possible—but under no circumstances was a commander to turn back from a fertile, desirable, and thinly-populated planet even if the natives objected.

And, Ledru thought, that was the position here. This world fell in the intermediate class. It was populated—obviously. But there was no great degree of technological advancement here, nor any exceptional density of population. Obviously not, for no cities had been visible from above during landing. Such natives as this planet had were still in the village stage, evidently.

Ledru waited until the members of his staff had gathered. There were eight men who by the code had to take part in first contact with an alien race: the Commander, the ship's anthropological officer, the lingual-translator technician, the ship's historian-recorder, the elected representative of the colonist-passengers, the representative of the crewmen, and two "observers" chosen at random from crew and passengers.

Ledru felt tense as he and his party, resplendent in their blazing unifors, rode down the interior elevator to ground-level, near the tail of the big ship. They paused just before going through the lock. A telescreen mounted to the side of the hatch revealed four alien figures waiting for them at the edge of the clearing.

Nineteen times in the five-hundred-year history of the Thanian gal-

actic expansion movement, a ship's commander had fallen martyr to alien beings in just this sort of first contact. Ledru tried to mask his uneasiness as the shining walls of his ship parted to allow the eight Thanians to step through. He had no desire to join his nineteen late colleagues in the ranks of the glorious martyrs.

UNCERTAINLY the eight Thanians moved forward to meet the alien delegation.

Ledru, of course, led the way; immediately behind him came Technician Chai and Colonist Zhuul, together bearing the burden of the cumbersome electronic lingual translator. The air, Ledru thought, was particularly stimulating to the nostrils—sweet and fresh, almost like new golden wine. The blue sky was dappled by fleecy white clouds. Ledru had rarely seen a more beautiful world, with its green-topped hills rising gently in the distance, and its air and sky and the pleasing yellow hue of its sun.

Inwardly he resolved that he would go to any extreme at all to secure this world for Thane. No matter if he had to root out every last one of the alien beings and personally slit his throat; this was a world of worlds, a miniature gem of a planet!

The aliens were waiting—four of them—tall, thin, pale-skinned beings. As Ledru covered the ground that separated them from him, he sized them up. They were all of them a good head taller then he was, but they lacked his stocky compact muscularity. Their bodies were lean and loose-jointed; they were the bodies of speedy runners, not of tough close-quarters fighters.

The aliens followed the standard format of humanoid life: they stood upright on two legs, with arms depending from their shoulders. They had no throat-wattles, and their five-fingered, single-thumbed hands looked absurdly malformed.

"Activate the translator," Ledru murmured to Technician Chai. The Technician swiftly threw three switches and a humming sound was audible.

Ledru said, "We come from beyond the skies, from the world known as Thane. We give you greetings."

There was a pause, while the translator reconverted Ledru's statement into abstract throught-patterns and repeated them in presumably understandable terms to the aliens. Ledru watched, hawkeyed. The aliens did not seem to be armed in any way. They wore only loose, somewhat skimpy robes. Their obscenely ugly five-toed feet were left bare, a touch Ledru could easily have done without.

When the translator had finished, the tallest of the four aliens said, widening his lips in what Ledru took to be a smile, "Put your machine away, Commander. We understand your language. Welcome to Earth."

Ledru was taken aback. The words had come direct from the alien's broad lips, without aid of the machine! He had spoken Thanian!

"How is it you speak the Tongue?"

The alien shrugged, saying, "It is an attribute of ours, Commander. My name is Smit. My companions are Loo, Theron, and Dun."

"I am—Commander Dorchan Ledru of Imperial Thane. My ship is the *Dark Star*." Ledru felt acute discomfort in talking to these—Earthmen. He had never had the experience of conversing with alien beings in his own language before, and it was frighteningly unsettling to do so now. He sensed his fellow Thanians stirring uneasily behind him.

Smit said, "Our village is not far from here. We saw your ship land and thought we would come to welcome you to Earth. It's been a long time since a ship landed on this planet."

Ledru blinked away sudden vertigo. "You've—had other spaceships land here?"

"Of course! Not recently—not in, oh, ten thousand years or so. But we've had ships here before." Smit nudged one of his companions. "Eh, Theron? Haven't we had ships, now!"

The four Earthment chuckled amiably.

Ledru felt inner churnings of dismay. *Ten thousand years? Ten thousand!*

Ten thousand years ago the Empire of Grand Thane was utterly undreamed-of. Thane was an isolated planet in an isolated star-cluster; ten thousand years ago it had still been divided into planetary factions, speaking different languages and embracing different creeds. Why, Thane had had the interplanetary drive only seven thousand years, the interstellar only fifteen hundred! The whole Thanian drive toward interstellar colonization was barely five hundred years old!

And these people talked of spaceship landings ten thousand years ago? It was a shattering notion. A race older than the Thanians, one that had reached interstellar travel so long ago . . .

It was impossible.

They're lying, Ledru thought. *Where are their cities, then, and their colonies in space? We have never seen this pale-skinned five-fingered race before. They're still planet-bound. They're lying to us.*

He felt dismay give way to anger and contempt. He said, "I may as well tell you frankly why we're here. We have come to establish a plane-

tary settlement on this world. We're willing to negotiate peacefully."

Something twinkled in the Earthman's eye. Ledru felt short and stubby and somehow woefully inferior as he stared up at the tall, thin being who smiled playfully at him. The Earthman said, "Of course you come to colonize. And why not? We have plenty of room."

Ledru felt fresh surprise. "You have no objections to our settling here?"

The Earthman shrugged. "I cannot speak for all my people. But I see no reason opposing you. Earth has room for more than it holds now, after all."

Ledru nodded tightly. "I see. Well, can you take me to whoever's in charge?"

"In charge?"

"The President, the Autarch, the Governor-General. The ruling coucil, if you have one. We'd like to make formal application to the Earth Government to build our colony here."

The Earthman's dark eyes widened slightly, and then he laughed, a pleasant deep laugh. "Earth Government? Why, why should we have one of those? We're free men, Commander Ledru."

"There's no government at all?"

"Naturally not."

Ledru frowned thoughtfully. *That places this planet in the category of a pre-civilization culture. Legally we can begin the colony right away, without the formality of haggling for it. But . . .*

It was hard to think of these people as being in the pre-civilization category. They were too self-assured, too easily confident, to be mere frightened primitives. And there was the matter of their knowing how to speak Thanian, Ledru thought worriedly.

Is there such a thing, he asked himself, *as a post-civilization culture?*

The Earthman said, "We shall go now. If you wish to visit our village, we'll be happy to escort you there tomorrow."

"Of course. Yes, I would like to see it."

"We will return in the morning." The Earthmen were smiling. One moment they stood before the party of Thanians; the next, they were gone, winked out like four snuffed flames.

Ledru passed a hand over his eyes. "They're gone," he muttered. "Poof! Just like that!"

"What do you make of this, Commander?" the anthropological officer asked.

Ledru turned. "You heard what they said. There's no government here.

Anarchy rules. Hence we can begin setting up the colony right away without negotiation."

"But . . . "

"No," Ledru snapped. "I don't want to discuss the situation with any of you. My course is charted. Let me alone."

SINCE THERE SEEMED to be no reason to the contrary, Ledru ordered an immediate inauguration of work on the building of the colony. The trained specialists who made up his permanent staff took their places, aiding the eager but unskilled colonists in making the clearings, trimming the felled trees, and in establishing the first rough outlines of the colony.

Work proceeded through the afternoon and along into the nightfall, when a definite chill entered the air. Although it would have been a simple matter to rig the ship's floodlights, Ledru had learned from experience that too much work on the first day was unwise, and so as soon as the lovely golden-red sun had dipped beneath the horizon he ordered a cessation of work. The colonists trooped back into their ship for their evening meal and their night's recreation, and darkness, broken only by the glimmering of the single large moon, descended to cover the handiwork of the day.

Morning came, and with it came more Earthmen. Shortly after dawn they began to gather, appearing, it seemed, from nowhere, and stood quietly to one side to watch the proceedings. A few of the bubble-houses were beginning to go up now. The colony was taking shape rapidly. A racial characteristic of the Thanians was their formidable, unstoppable energy.

Ledru, supervising, recognized the Earthman named Smit, and hailed him.

The Earthman said, "You work fast. The colony is rising well."

Ledru nodded. "We have the excitement of growth in us. It doubles the strength of our muscles."

"I understand the sensation. We of Earth had it once too. Once."

The Thanian turned and stared upward into the Earthman's unreadable eyes. "What do you mean, had it *once?* I wish I understood you people."

"Would you like to visit our village now?"

Ledru said, "Right now? In the middle of work?"

"We can be there in a moment, and back again almost as fast. Come: give me your hand."

"My hand? Why?"

"It speeds the trip."

Unresisting, Ledru slipped his blue hand into the Earthman's pink one. He felt the sudden tenseness of the Earthman's grasp; then dizziness swirled around him and he felt himself falling . . .

The sensation ceased almost at once. Ledru was steady again; Smit stood a few feet away, smiling, and nearby were three or four Earthpeople Ledru had not seen before, including two that seemed to be females. They all stared at him with the same frank, open curiosity.

Behind them, Ledru saw several huts—simple things made of some pale plastic, looking hardly more complex than the rudimentary shelters his colonists were erecting.

"Where are we?" he demanded. "And how did I get here? Answer me!"

Smit grinned. "This is my village. You got here by instantaneous transport, of course."

"What? But . . ."

"It was a surprise to me to learn that your people are incapable of it," Smit said. "My village is half a planetary radius distant from your colony."

Ledru performed a quick computation and gasped. "But—thousands of miles!"

"Yes!"

Ledru tugged at his wattles. He turned slowly, looking around. He saw other huts in the distance, well-spaced, with greenness all about. Then, with shock, he recognized a familiar object: a spaceship towering heavenward no more than a thousand meters away. At this distance he could see that the ship, though plainly recognizable as to function, was of totally alien design. It had no buttresses, for one thing, though its landing-fins served the same stabilizing purpose. And the metal skin of the ship was pitted and corroded by the oxidization of centuries—millenia, perhaps.

"That ship—why is it here?"

"A monument," Smit said somberly. "It's the last spaceship ever manned by Earthpeople. It's been standing here for ten thousand years."

"I don't understand," Ledru complained. Somehow, next to these people he felt hopelessly primitive and crude, and the feeling irked him. His sweat-glands were discharging with embarrassing self-will. "Did Earth once have the interstellar drive?" he asked.

"Of course," Smit said. "Long ago. Earth once had colonies on a thousand worlds, Commander."

Ledru shook his head stubbornly. "That can't be. I've visited nearly that many planest myself. Seen all sorts of humanoid life, but nothing that could be remotely related to you people."

Sadly Smit said, "Our colonies died away, Commander. As yours will."

Ledru looked up, eyes smarting. "What did you say?"

"Your colonies will die away."

Ledru stared at the big ship and saw the jungle vines crawling over its fins like hungry serpents. "Never," he spat out doggedly. "We haven't even begun to expand yet. By the time we're finished, there'll be Thanians living everywhere in the galaxy."

"As once there were Earthmen," Smit said.

Ledru was silent, uncomprehending. The Earthman said mildly, "It was three hundred thousand years ago that we first voyaged into interstellar space, Commander. We plunged outward as if goaded by a raging flame behind us. Earth colonies sprung up on hundred of planets; our empire spangled the skies."

"No," Ledru said. "You can't be telling the truth. There's no sign anywhere in the galaxy of . . . "

"Our expansion cycle was finished within a hundred thousand years," Smit went on. "At that time you of Thane were gibbering in your forests. Our empire began to shrink. Birthrates fell. Homesick, Earthmen returned to the mother world. It was slow, so slow no one realized what was taking place. The tide ebbed. Before long we had fifty worlds instead of a thousand; then five, then three. Then one. Earth."

In a quivering voice Ledru said, "And how many Earthmen are there now?"

"We number one hundred thousand," Smit said. "This is why there is room for you on Earth. Once thirty billion of us lived here."

There was something convincing about the Earthman's story, Ledru admitted to himself. But he found it hard to accept the bland statement that an empire of a thousand suns had shrunk to a mere hundred thousand amiable farmers living on a single green world.

Ledru felt sudden burning contempt for these mild-mannered Earthmen. A thousand worlds had slipped through their grasp. What fumbling weaklings they must be!

He said, "It must have a very great tragedy, the loss of your empire."

Smit smiled—a patronizing smile, Ledru wondered? "Tragedy? Hardly. We saw it as the inevitable turning of the great wheel, the com-

ing round of the cycle. And we are far from unhappy now, in the twilight of our days. We communicate by telepathy; we travel instantaneously wherever we wish. We have love and amusement and all the food we need. What more can a civilized person desire? "

"But . . . " Ledru was sputtering now. "But—what about glory, and the stars, and—how can you be content to remain on this little world and . . . "

Again the smile. "You forget: we left our little world once. We ventured forth and did the things your race is now doing, and the glory and the stars were ours. We have lost interest in these things—as, in time, you will do."

"Wrong! " Ledru shouted. "We're made of stronger stuff than you—you *dreamers*! Just because *your* race failed, just because *your* empire died . . . "

"There was a race before us," Smit remarked. "They came out of Rigel when we of Earth were jungle apes, and they colonized the stars too. And they died away, as we are doing. Our explorers found them, five thousand of them, dreaming quietly of the glories that had been theirs. And we pitied them in their decline. Now our turn has come. And some day it will be yours."

Never!" Ledru felt like beating his clenched fists against the bodies of these smug Earthers. "Our empire will outlast the stars themselves!"

"The stars die," Smit said quietly. "Their fires die down. And it is the same way with stellar empires. The Rigelians had their day, and twilight came for them. Now it is we who live in the shadow of yesterday. And someday, not too soon . . . "

"Never! "

"The fires die down, Ledru."

The troubled Thanian shook his head fiercely. "I've had about enough of this. Take me back to my ship! "

"Certainly."

Smit reached out a hand.

There was the moment of vertigo, and then the familiar bulk of the *Dark Star* loomed before him, and all around the busy colonists labored to build this latest of Thane's worlds. Ledru glared at the Earthman angrily. "Keep away from my people, hear me? Maybe your bunch failed, but we won't. I don't want you depressing us with your gloomy stories of a future that doesn't concern us."

"As you wish," Smit said lightly. He smiled one last time, and then he was gone.

Ledru muttered a curse toward the general vicinity of the place where the Earthman had been standing. Then, laughing at himself for having let himself get so disturbed over a trifle, he cupped his hands and shouted, "Hurry up, there! Let's get this place built!"

They hurried. Ledru felt the old impatience reasserting itself. He wanted to get back to Thane and pick up the next load of colonists and transport them to their new world. Faster, faster, as Thane spread out over the galaxies.

Die down? Never! It'll never happen to us! We're different!

He blotted the fate of the Earthmen from his mind. There was too much work to be done. Impatient, Ledru grabbed a shovel himself and helped out. He worked like a demon all the long sunlit afternoon, concerned only with getting this colony built so he could get on about his business, unmindful of the shadowed destiny that awaited his race three hundred thousand years hence.

Not By Its Cover

by PHILIP K. DICK

Collectors' editions of the great classics bound in Martian wub-fur—surely, the publisher thought, this would be a unique item. And he was so right!

THE ELDERLY, cross-tempered president of Obelisk Books said irritably, "I don't want to see him, Miss Handy. The item is already in print; if there's an error in the text we can't do anything about it now."

"But Mr. Masters," Miss Handy said, "it's such an important error, sir. *If* he's right. Mr. Brandice claims that the entire chapter—"

"I read his letter; I also talked to him on the vidphone. I know what he claims." Masters walked to the window of his office, gazed moodily out at the arid, crater-marred surface of Mars which he had witnessed so many decades. *Five thousand copies printed and bound*, he thought. *And of that, half in gold-stamped Martian wub-fur. The most elegant, expensive material we could locate. We were already losing money on the edition, and now this.*

On his desk lay a copy of the book, Lucretius' *De Rerum Natura*, in the lofty, noble John Dryden translation. Angrily, Barney Masters turned the crisp white pages. Who would expect anyone on Mars to know such an ancient text that well? he reflected. And the man waiting in the outer office consisted of only once out of eight who had written or called Obelisk Books about a disputed passage.

Disputed? There was no contest; the eight local Latin scholars were right. It was simply a question of getting them to depart quietly, to forget they had ever read through the Obelisk edition and found the fnugled up passage in question.

Touching the button of his desk intercom, Masters said to his re-

ceptionist, "Okay; send him." Otherwise the man would never leave; his type would stay parked outside. Scholars were generally like that; they seemed to have infinite patience.

The door opened and a tall gray-haired man, wearing old-fashioned Terra-style glasses, loomed, briefcase in hand. "Thank you, Mr. Masters," he said, entering. "Let me explain, sir, why my organization considers an error such as this so important." He seated himself by the desk, unzipped his briefcase briskly. We are after all a colony planet. All our values, mores, artifacts and customs come to us from Terra. WODAFAG considers your printing of this book . . ."

"'WODAFAG'?", Masters interrupted. He had never heard of it, but even so he groaned. Obviously one of the many vigilant crank outfits who scanned everything printed, either emanating locally here on Mars or arriving from Terra.

"Watchmen Over Distortion and Forged Artifacts Generally," Brandice explained. "I have with me an authentic, correct Terran edition of *De Rerum Natura*—the Dryden translation, as is your local edition." His emphasis on *local* made it sound slimy and second-rate; as if, Masters brooded, Obelisk Books was doing something unsavory in printing books at all. "Let us consider the inauthentic interpolations. You are urged to study first my copy—." He laid a battered, elderly, Terran-printed book open on Masters' desk. "—in which it appears correctly. And then, sir, a copy of your own edition; the same passage." Beside the little ancient blue book he laid one of the handsome large wub-fur bound copies which Obelisk Books had turned out.

"Let me get my copy editor in here," Masters said. Pressing the intercom buttom he said to Miss Handy, "Ask Jack Snead to step in here, please."

"Yes, Mr. Masters."

"To quote from the authentic edition," Brandice said, "we obtain a metric rendering of the Latin as follows. Ahem." He cleared his throat self-consciously, then began to read aloud.

"From sense of grief and pain we shall be free;
We shall not feel, because we shall not be.
Though earth in seas, and seas in heaven were lost,
We should not move, we only should be toss'd."

"I know the passage," Masters said sharply, feeling needled; the man was lecturing him as if he were a child.

"This quatrain," Brandice said, "is absent from your edition, and the following spurious quatrain—of God knows what origin—appears

in its place. Allow me." Taking the sumptuous, wub-fur bound Obelisk copy, he thumbed through, found the place; then read.

"From sense of grief and pain we shall be free;
Which earth-bound man can neither qualify nor see.
Once dead, we fathom seas cast up from this:
Our stint on earth doth herald an unstopping bliss."

Glaring at Masters, Brandice closed the wub-fur bound copy noisily. "What is most annyoing," Brandice said, "is that this quatrain preaches a message diametric to that of the entire book. Where did it come from? *Somebody* had to write it; Dryden didn't write it—Lucretius didn't." He eyed Masters as if he thought Masters personally had done it.

The office door opened and the firm's copy editor, Jack Snead, entered "He's right," he said resignedly to his employer. "And it's only one alteration in the text out of thirty or so; I've been ploughing through the whole thing, since the letters started arriving. And now I'm starting in on other recent catalog-items in our fall list." He added, grunting, "I've found alterations in several of them, too."

Masters said, "You were the last editor to proofread the copy before it went to the typesetters. Were these errors in it then? "

"Absolutely not," Snead said. "And I proofread the galleys personally; the changes weren't in the galleys, either. The changes don't appear until the final bound copies come into existence—if that makes any sense. Or more specifically, the ones bound in gold and wub-fur. The regular bound-in-boards copies—they're okay."

Masters blinked. "But they're all the same edition. They ran through the presses together. In fact we didn't originally plan an exclusive, higher-priced binding; it was only at the last minute that we talked it over and the business office suggested half the edition be offered in wub-fur."

"I think," Jack Snead said," we're going to have to do some close-scrutiny work on the subject of Martian wub-fur."

AN HOUR LATER aging, tottering Masters, accompanied by copy editor Jack Snead, sat facing Luther Saperstein, business agent for the pelt-procuring firm of Flawless, Incorporated; from them, Oblelisk Books had obtained the wub-fur with which their books had been bound.

"First of all," Masters said in a brisk, professional tone, "what is wub-fur? "

"Basically," Saperstein said, "in the sense in which you're asking the question, it is fur from the Martian wub. I know this doesn't tell you

much, gentlemen, but at least it's a reference point, a postulate on which we can all agree, where we can start and build something more imposing. To be more helpful, let me fill you in on the nature of the wub itself. The fur is prized because, among other reasons, it is rare. Wub-fur is rare because a wub very seldom dies. By that I mean, it is next to impossible to slay a wub—even a sick or old wub. And, even though a wub is killed, the hide lives on. That quality imparts its unique value to home-decoration, or, as in your case, in the binding of lifetime, treasured books meant to endure."

Masters sighed, dully gazed out the window as Saperstein droned on. Beside him, his copy editor made brief cryptic notes, a dark expression on his youthful, energetic face.

"What we supplied you," Saperstein said, "when you came to us—and remember: you came to us; we didn't seek you out—consisted of the most select, perfect hides in our giant inventory. These living hides shine with a unique luster all their own; nothing else either on Mars or back home on Terra resembles them. If torn or scratched, the hide repairs itself. It grows, over the months, a more and more lush pile, so that the covers of your volumes become progressively luxurious, and hence highly sought-after. Ten years from now the deep-pile quality of these wub-fur bound books—"

Interrupting, Snead said, "So the hide is still alive. Interesting. And the wub, as you say, is so deft as to be virtually impossible to kill." He shot a swift glance at Masters. "Every single one of the thirty-odd alterations made in the texts in our books deals with immortality. The Lucretius revision is typical; the original text teaches that man is temporary, that even if he survives after death it doesn't matter because he won't have any memory of his existence here. In place of that, the spurious new passage come out and flatly talks about a future of life predicated on this one; as you say, at complete variance with Lucretius' entire philosophy. You realize what we're seeing, don't you? The damn wub's philosophy superimposed on that of the various authors. That's it; beginning and end." He broke off, resumed his note-scratching, silently.

"How can a hide," Masters demanded, "even a perpetually living one, exert influence on the contents of a book? A text already printed—pages cut, folios glued and sewed—it's against reason. Even *if* the binding, the damn hide, is really alive, and I can hardly believe that." He glared at Saperstein. "If it's alive, what does it live on?"

"Minute particles of food-stuffs in suspension in the atmosphere," Saperstein said, blandly.

Rising to his feet, Masters said, "Let's go. This is ridiculous."

"It inhales the particles," Saperstein said, "through its pores." His tone was dignified, even reproving.

Studying his notes, not rising along with his employer, Jack Snead said thoughtfully, "Some of the amended texts are fascinating. They vary from a complete reversal of the original passage—and the author's meaning—as in the case of Lucretius, to very subtle, almost invisible corrections—if that's the word—to texts more in accord with the doctrine of eternal life. The real question is this. Are we faced merely with the opinion of one particular life form, *or does the wub know what it's talking about?* Lucretius' poem, for instance; it's very great, very beautiful, very interesting—as poetry. But as philosophy, maybe it's wrong. I don't know. It's not my job; I simply edit books; I don't write them. The last thing a good copy editor does is editorialize, on his own, in the author's text. But that is what the wub, or anyhow the post-wub pelt, is doing." He was silent, then.

Saperstein said, "I'd be interested to know if it added anything of value."

"Poetically? Or do you mean philosophically? From a poetic or literary, stylistic point of view its interpolations are no better and no worse than the originals; it manages to blend in with the author well enough so that if you didn't know the text already you'd never notice." He added broodingly, "You'd never know it was a pelt talking."

"I meant from a philosophical point of view."

"Well, it's always the same message, monotonously ground out. There is no death. We go to sleep; we wake up—to a better life. What it did to *De Rerum Natura;* that's typical. If you've read that you've read them all."

"It would be an interesting experiment," Masters said thoughtfully, "to bind a copy of the Bible in wub-fur."

"I had that done," Snead said.

"And?"

"Of course I couldn't take time to read it all. But I did glance over Paul's letters to the Corinthians. It made only one change. The passage that begins, 'Behold, I tell you a mystery—' it set all of that in caps. And it repeated the lines, 'Death, where is thy sting? Grave, where is thy victory?' ten times straight; ten whole times, all in caps. Obviously the wub agreed; that's its own philosophy, or rather theology." He said, then, weighing each word, "This basically is a theological dispute . . . between the reading public and the hide of a Martian animal that looks

like a fusion between a hog and a cow. Strange." Again he returned to his notes.

After a solemn pause, Masters said, "You think the wub has inside information or don't you? As you said, this may not be just the opinion of one particular animal that's been successful in avoiding death; it may be the truth."

"What occurs to me," Snead said, "is this. The wub hasn't merely learned to avoid death; it's actually done what it preaches. By getting killed, skinned, and its hide—still alive—made into book covers—it has conquered death. It lives on. In what it appears to regard as a better life. We're not just dealing with an opinionated local life form; we're dealing with an organism that has already done what we're still in doubt about. Sure it knows. It's a living confirmation of its own doctrine. The facts speak for themselves. I tend to believe it."

"Maybe continual life for *it*," Masters disagreed, "but that doesn't mean necessarily for the rest of us. The wub, as Mr. Saperstein points out, is unique. The hide of no other life form either on Mars or on Luna or Terra lives on, imbibing life from microscopic particles in suspension in the atmosphere. Just because *it* can do it—"

"Too bad we can't communicate with a wub hide," Saperstein said. "We've tried, here at Flawless, ever since we first noticed the fact of its post-mortem survival. But we never found a way."

"But we at Obelisk," Snead pointed out, "have. As a matter of fact I've already tried an experiment. I had a one-sentence text printed up, a single line reading: 'The wub, unlike every other living creature, is immortal.'

"I then had it bound in wub-fur; then I read it again. It had been changed. Here." He passed a slim book, handsomely appointed, to Masters. "Read it as it is now."

Masters read aloud: "The wub, like every other living creature, is immortal."

Returning the copy to Snead he said, "Well, all it did was drop out the *un;* that's not much of a change, two letters."

"But from the standpoint of meaning," Snead said, "it constitutes a bombshell. We're getting feedback from beyond the grave—so to speak. I mean, let's fact it; wub-fur is technically dead because the wub that grew it is dead. This is awfully damn close to providing an indisputable verification of the survival of sentient life after death."

"Of course there is one thing," Saperstein said hesitantly. "I hate to bring it up; I don't know what bearing it has on all this. But the Mar-

tian wub, for all its uncanny—even miraculous—ability to preserve itself, is from a mentational standpoint a stupid creature. A Terran opossum, for example, has a brain one-third that of a cat. The wub has a brain one-fifth that of an opossum." He looked gloomy.

"Well," Snead said, "the Bible says, 'The last shall be the first.' Possibly the lowly wub is included under this rubric; let's hope so."

Glancing at him, Masters said, "You *want* eternal life?"

"Certainly," Snead said. "Everybody does."

"Not I," Masters said, with decisiveness. "I have enough troubles now. The last thing I want is to live on as the binding of a book—or in any fashion whatsoever." But inside, he had begun silently to muse. Differently. Very differently, in fact.

"It sounds like something a wub would like," Saperstein agreed. "Being the binding of a book; just lying there supine, on a shelf, year after year, inhaling minute particles from the air. And presumably meditating. Or whatever wubs do after they're dead."

"They think theology," Snead said. "They preach." To his boss he said, "I assume we won't be binding any more books in wub-fur."

"Not for trade purposes," Masters agreed. "Not to sell. But - - " He could not rid himself of the conviction that some use lay, here. "I wonder," he said, "if it would impart the same high level of survival factor to anything it was made into. Such as window drapes. Or upholstery in a float-car; maybe it would eliminate death on the commute paths. Or helmet-liners for combat troops. And for baseball players." The possibilities, to him, seemed enormous ... but vague. He would have to think this out, give it a good deal of time.

"Anyhow," Saperstein said, "my firm declines to give you a refund; the characteristics of wub-fur were known publically in a brochure which we published earlier this year. We categorically stated—"

"Okay, it's our loss," Masters said irritably, with a wave of his hand. "Let it go." To Snead he said, "And it definitely says, in the thirty-odd passages it's interpolated, that life after death is pleasant?"

"Absolutely. 'Our stint on earth doth herald an unstopping bliss.' That sums it up, that line it stuck into *De Rerum Natura;* it's all right there."

"'Bliss,'" Masters echoed, nodding. "Of course, we're actually not on Earth; we're on Mars. But I suppose it's the same thing; it just means life, wherever it's lived." Again, even more gravely, he pondered. "What occurs to me," he said thoughtfully, "is it's one thing to talk abstractly about 'life after death'. People have been doing that for fifty thousand

years; Lucretius was, two thousand years ago. What interest me more is not the big overall philosophical picture but the concrete fact of the wub-pelt; the immortality which it carried around with it." To Snead he said, "What other books did you bind in it?"

"Tom Paine's *Age of Reason,*" Snead said, consulting his list.

"What were the results?"

"Two-hundred-sixty-seven blank pages. Except right in the middle the one word *bleh.*"

"Continue."

"The *Britannica.* It didn't precisely change anything, but it added whole articles. On the soul, on transmigration, on hell, damnation, sin, or immortality; the whole twenty-four volume set became religiously oriented." He glanced up. "Should I go on?"

"Sure," Masters said, listening and meditating simultaneously.

"The *Summa Theologica* of Thomas Aquinas. It left the text intact, but it periodically inserted the biblical line, 'The letter killeth but the spirit giveth life.' Over and over again.

"James Hilton's *Lost Horizon.* Shangri-La turns out to be a vision of the after life which—"

"Okay," Masters said. "We get the idea. The question is, what can we do with this? Obviously we can't bind books with it—at least books which it disagrees with." But he was beginning to see another use; a much more personal one. And it far outweighed anything which the wub-fur might do for or to books—in fact for any inanimate object.

As soon as he got to a phone—

"Of special interest," Snead was saying, "is its reaction to a volume of collected papers on psychoanalysis by some of the greatest living Freudian analysts of our time. It allowed each article to remain intact, but at the end of each it added the same phrase." He chuckled. "'Physician, heal thyself.' Bit of a sense of humor, there."

"Yeah," Masters said. Thinking, unceasingly, of the phone and the one vital call which he would make.

BACK IN HIS own office at Obelisk Books, Masters tried out a preliminary experiment—to see if his idea would work. Carefully, he wrapped a Royal Albert yellow bone-china cup and saucer in wub-fur, a favorite from his own personal collection. Then, after much soul-searching and trepidation, he placed the bundle on the floor of his office and, with all his declining might, stepped on it.

The cup did not break. At least it did not seem to.

He unwrapped the package, then, and inspected the cup. He had been right; wrapped in living wub-fur it could not be destroyed.

Satisfied, he seated himself at his desk, pondered one last ime.

The wrapper of wub-fur had made a temporary, fragile object imperishable. So the wub's doctrine of external survival had worked itself out in practice—exactly as he had expected.

He picked up the phone, dialed his lawyer's number.

"This is about my will," he said to his lawyer, when he had him on the other end of the line. "You know, the latest one I made out a few months ago. I have an additional clause to insert."

"Yes, Mr. Masters," his lawyer said briskly. "Shoot."

"A small item," Masters purred. "Has to do with my coffin. I want it mandatory on my heirs—my coffin is to be lined throughout, top, bottom and sides, with wub-fur. From Flawless, Incorporated. I want to go to my Maker clothed, so to speak, in wub-fur. Makes a better impression that way." He laughed nonchalantly, but his tone was deadly serious—and his attorney caught it.

"If that's what you want," the attorney said.

"And I suggest you do the same," Masters said.

"Why?"

Masters said, "Consult the complete home medical reference library we're going to issue next month. And make certain you get a copy that's bound in wub-fur; it'll be different from the others." He thought, then, about his wub-fur-lined coffin once again. Far underground, with him inside it, with the living wub-fur growing, growing.

It would be interesting to see the version of himself which a choice wub-fur binding produced.

Especially after several centuries.

Bound To Be Read

MARGINAL

This section deals with material which will be of interest to a limited area of science fiction enthusiasm, and the criterion here will be that of interest. Reasonable literacy can be assumed except where something needs to be noted as particularly good or bad—but only material to be recommended on the whole will be discussed.

IN SEARCH OF WONDER
by Damon Knight

Second Edition, Revised and Enlarged; Advent: Publishers, P.B. Box 9228, Chicago, Illinois 60690; 1967; 306pp including index; $6.00.

If you have read the editorial, then you already know that this book is recommended. The enlargement over the first edition is substantial, and the revisions (such of them that I was aware of) are interesting. If you felt that the original was worth the price asked, then the odds are in your favor that you'll find the second edition worth the extra price, even allowing for inflation between then and now. Certainly you can get an awful lot less for $6.00, as books go today.

No publisher is ever going to tell his public that the latest book on his list is bad or half-bad; no writer of jacket blurbs is going to point out the faults; no advertising is going to qualify its promotion. All three will use every semantic device they can to persuade you that this book is one which you will positively want to read; and if they think they can get away with it, all three will imply as stongly as possible that this work will echo down the centuries, etc., *ad nauseam*.

Now it is true that there are, indeed, some jacket blurbs and some book advertising that is entirely on the level: this particular one *is* one you may want to read; that one *is* one which should repay re-reading, and perhaps endure beyond your lifetime or mine.

But all the science fiction that appears in hard covers or soft covers hardly comes under such a heading; so the only antidote to advertising is criticism.

Unfortunately, life isn't so simple as that sentence above suggests. There are widely differing values in the antidote, too; and just as a large percentage of what is puffed as great science fiction is poor to worthless, a large percentage of what is labelled criticism of science fiction is also poor to worthless. For while a person who wants to be a doctor, a nuclear phy-

sicist, an engineer, etc., must fulfill certain qualifications and obtain some sort of license to practice his vocation (a license subject to withdrawal for malfeasance), anyone at all can call himself a critic. All he needs is to get someone to publish what he calls his criticism, and in the science fiction field he can publish it himself in his own amateur journals and circulate it. What is worse, no matter how inept, stupid, or downright illiterate he is, there are going to be some readers who follow him. This is partly because there are many readers who are just as ignorant as the ignorant "critic"; he will have succeeded in feeding their own half-baked opinions back to them under the guse of authority, and people *love* to have authority figures assure them that their present opinions are right and valid.

Then there are the more literate, sophisticated, and knowledgeable persons writing criticism who are nonetheless unqualified for science fiction because of one or more of the following reasons (a) they know the mainstream but do not know enough about science fiction (b) they despise science fiction*ipso facto* (c) they condescend, and won't "hurt someone's feelings", under the illusion that by maintaining a bland, everything-is-wonderful attitude they are being "constructive" (d) they are afraid of offending editors, publishers, or readers by coming out and saying that this or that highly-touted work is actually very poor or even worthless.

Damon Knight is not among the above forms of animal life in the critical field. He loved science fiction and had read a great deal of it, and had grasped the standards, before he started writing about it seriously. And he still shows signs of development in comprehension and standards, as every good critic must; for there is still another form of bad criticism, and this comes from the critic who may be a very good craftsman in his calling but who closed his mind and stopped learning some years back. The good critic is going to develop as he goes along, and development must include re-examining various judgments; thus the honest critic will revise former evaluations now and then. His fundamental standards (such as Knight's "Credo" which introduces both editions) will not have changed, but his comprehension and grasp of just what these standards imply will have grown. And if he is honest, as Knight is, he will acknowledge once in a while that he was wrong, or just didn't see something back then. Such public self-criticism won't happen too often, but it will happen.

Knight's four-point credo does not seem very startling today, partly because it has had some effect; some persons who were startled then have come to see that it is no more than simple and obvious common sense. But we have not attained anything like an ideal condition either among writers or readers of science fiction—one still hears the wail of "destructive criticism" emanating from various sides—so points three and four cannot be repeated too often: "3. That science fiction is a field of literature worth taking seriously, and that ordinary critical standards can be meaningfully applied to it: *e.g.*, originality, sincerity, style, construction, logic, coherence, sanity, garden variety grammar. 4. That a bad book hurts science fiction more than ten bad notices."

The credo of the opposition to criticism is that it is "destructive" of a critic to *say* that something bad is bad—and worse, to analyse it and show exactly why. (This has nothing to do with your or my possible disagreement on this or that point; it has everything to do with awareness of standards and getting rid of the notion that because we like or enjoy something it must therefore be excellent. There is no reason why we cannot find pleasure in a story which is really quite bad; there is every reason why we should be willing to acknowledge the fact. It is damaging to the art of science fiction when enjoyable but bad work is puffed as "great" science fiction.)

"Bad notices" then consist not of reviews or discussions which take note of faults and determine that they add up to general badness, but consist of reviews which pretend that it doesn't matter, or that the bad is really not so bad, or is actually good.

The odds are that you will find Knight tearing pretty mericlessly into some stories you enjoyed; you will also find him praising others you liked. There's nothing wrong with feeling, after reading his analysis, "Well, I still like it" or "He's wrong about this". You will have this reaction to any honest and competent critic you read to any large extent.

The odds are, too, that you will enjoy his comments on some stories which you, too, thought were bad, and his praise of some you thought good. But it is not the praise or the attack which matters. It is the detailed reasons for the praise or the attack, the standards by which praise or attack is made. If you just cannot agree at all—if, particularly, the standards are entirely unacceptable to you—then Knight (or any other critic whose standards are unacceptable to you) is not for you. It would be well to think about the reason for this, though; it might be that you do not want to consider standards at all in science fiction. That is your right; but along with such a right should go the responsibility of not trying to pretend that science fiction is really worthwhile literature at all. If you want to persuade anyone the area which we call science fiction does include great works, then you must accept the standards by which great works are judged in any other area of fiction. Damon Knight has not invented such standards; he has only applied them.

The first person in the field that I remember trying to apply the general standards for excellence in fiction to science fiction, and to see just what can and what cannot stand up under them, was Claire P. Beck, who brought out a little volume called *Hammer And Tongs* circa 1936. He was regarded as a "destructive" critic. Damon Knight was the second to engage in this occupation on a scale larger than the fan magazines (I'm thinking only in terms of general circulation when I use that word "scale"). Lester del Rey ran Knight's columns in *SCIENCE FICTION ADVENTURES*, and I ran them in *FUTURE SCIENCE FICTION, SCIENCE FICTION QUARTERLY, SCIENCE FICTION STORIES*, and *DYNAMIC SCIENCE FICTION*. Later, Damon moved in to the more "respectable" *MAGAZINE OF FANTASY AND SCIENCE FICTION*—and finally resigned rather than pay

the price of respectability: he refused to revise a review which showed how bad the latest book by one of F&SF's favorite authors was, and the editor would not run it as written.

The cries of "destructive critic" arose from the very first, and they still resound.

They can be ignored. Such persons do not know what "destructive" criticism is.

Destructive criticism is that alleged criticism which extols the bland, the easy-to-read trifle, the worthless and shoddy, and snipes at the very best on the grounds that it makes demands upon the reader. (Not that everything easy to read is bad; but easy reading cannot be the criterion for worthy fiction—besides, what is easy to read for one reader may be very difficult for another, and vice versa.) It is very indulgent toward incompetence and laziness. It is counterfeit criticism.

Genuine criticism preserves the best by weeding out the bad to the worst and showing the difference between the weeds and the flowers. It is not "nice" to incompetence and laziness.

There is one error in the book for which I myself must accept some responsibility. I do not remember telling Damon that the story he refers to in the footnote to page 119 *(The Case of the Vanishing Cellars,* by J. S. Klimaris) appeared in SCIENCE FICTION QUARTERLY; if I did, either I was drunk or the legendary Lowndes memory had already begun to become mythical. The story appeared in the August 1942 issue of *FUTURE COMBINED WITH SCIENCE FICTION,* and I should have mentioned this to Damon some time between the two editions of his book. *Mea culpa!*

My only serious disagreement is marginal. While it is true that, after 1932, Leo Morey's artwork both on interiors and covers was generally very poor (although there were a few strikingly lovely covers—those for the Professor Jameson stories—after 1932), it is very doubtful that Editor Sloane had any say about the matter at all. In any event, poor as most of his work was in the 1933-1938 period, it cannot detract from some of the very good artwork, both in color and black-and-white, between 1929 and 1932. His color sense was always very fine, and it is still amazing to see the delicate tones and blends which come through the very inferior three plate engraving process. The error, of course, was making him (or for that matter anyone) exclusive artist for the magazine—but this was very likely an economic necessity. For all that, when he was in top form, Leo Morey was one of the best science fiction artists of the Gernsback era.

Lengthy as this commentary has been, it hardly begins to do justice to the subject and to the first long-lasting and excellent critic in science fiction.

The artwork strikes me as being neither bad nor relevant.

Highly recommended. RAWL

Down To Earth

(Continued from page 7)

feel that material of the 50s is too recent for FSF. (Of course, eventually, if we come to the point where a truly substantial percentage of the older material has been presented, some of the Tales of Wonder from such sources might be a good idea. But I do not see this issue ripening for a number of years.)

No, I never read *PLANET COMICS*, etc., my bias always having been strong against "comics" that were not funny strips; when well done, the comic medium can present its material *better* than the prose medium—but this requires that the material be such that would not be more suitable for prose treatment in the first place. Generally speaking, adapting good prose stories to the comic medium is a debasing operation, and I have no interest at all in such ventures.

I appreciate your thoughtfulness in patronizing a newsdealer who handles FSF, in order to encourage his continuance in carrying the magazine. And I hope that, despite what may be disappointing replies to your questions, you'll still approve the editor's answers to readers' letters in general.

David Charles Paskow writes: "There are bound to be people who will object to the limited number of stories in this issue (#6)—and it's interesting that this is less noticeable on the contents page than on the Preference Page—but they should remember that early science fiction tended to be longer if it was memorable. The memorable short stories did not evolve until the late 40s, with Bradbury, Sturgeon, Kuttner, etc. An issue such as number six, is especially interesting to me because I was unfamiliar with two of the three main authors (I'm twenty-one and have only been reading s-f since 1956; I've tried to fill in the gaps in my knowledge through back issues of magazines and the writings of Sam Moskowitz and Damon Knight.) . . .

"How come no index, as you have with *MAGAZINE OF HORROR?*

Due to mechanical failures, one long story in the 6th issue did not get set up the proper page width, and the effect of this combined with a longer than usual editorial (something which I promise to try to avoid in the future) was to crowd out a short story which might otherwise have been fitted in. (Eliminating *Down To Earth* would not have been sufficient; I did look to see if it could be gotten in that way.) By the

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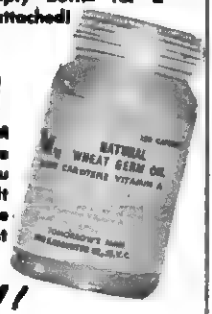

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time the mechanical error was discovered, it was too late to re-set *The Individualists* . . . Some time, I shall describe our printing operation for you, because it sounds like science fiction! Outside of some of the story titles, etc., no type at all is used.

We'll have to hold the index until issue #12, then run the index to the first two volumes together. The Editor humbly acknowledges that he forgot.

William Gaunt, puts it succinctly: "Congratulations on a good issue (#6). Enjoyed longer stories and please keep up the good work."

Actually, I felt a little worried about the fact that only four stories could be run, remembering that, back in the 30s, when an issue of the large-sized *AMAZING STORIES* or *SCIENCE WONDER STORIES* or *AIR WONDER STORIES* appeared with only four tales in the issue, I felt cheated—until I read the stories . . . In more recent times I believe I have seen at least one issue of *ASTOUNDING* (or perhaps *ANALOG,* I'm not sure) with only four stories in an issue. But I did expect a number of protests, and it is good to have heard from two readers who did not feel cheated; as this is being typed, no objections have been received, but it is too early in the season to feel assured as yet.

Charles Hidley who feels that Finlay's style is out of place in science fiction and thus his work cannot stand up to Paul, Morey, Dold, etc., goes on to say: "The likelihood of my ever finishing *The Hell Planet* is so dim that I might as well get

Coming Next Issue

An emergency flash broadcast over the world! . . . What catastrophe did this herald? Had it to do with the Dark Moon? . . . It seemed to Harkness that Schwartzmann was hours in reaching the switch . . . A voice came shouting into the room: "By order of the Stratosphere Control Board, all traffic is forbidden above the forty level. Liners take warning. Descend at once." . . .

"Emergency news report," said another voice, and Harkness strained every faculty to hear. "Highline ships attacked by unknown foe. Three passenger carriers of the Northpolar Short Line reported crashed. Incomplete warnings from their commanders indicate they were attacked. Patrol ship has spotted one crash. They have landed beside it and are reporting . . .

"The report is in; it is almost beyond belief. They say the liner is empty, that no human body, alive or dead, is in the ship. She was stripped of crew and passengers in the air.

"We await confirmation. Danger apparently centered over the arctic regions, but traffic has been ordered from all upper levels—"

The voice that had been held rigidly to the usual calm clarity of an official announcer became high-pitched and vibrant. "Stand by!" it shouted. "An S.O.S. is coming in. We will put it through our amplifiers; give it to you direct!"

The newscaster crackled and hissed; they were waiving all technical niceties at R. N. Headquarters, Harkness knew. The next voice came clearly, though a trifle faint.

"Air Patrol! Help! Position eighty-two—fourteen north, ninety-three—twenty east—Superliner Number 87-G, flying at R. A. plus seven. We are attacked!—Air Patrol!—Eighty-two—fourteen north, ninety-three—twenty—"

The voice that was repeating the position was lost in a pandemonium of cries. Then: "Monsters! They have seized the ship! They are tearing at our ports—"

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DARK MOON

by Charles Willard Diffin

my tally off now to help influence the statistics; just cannot stomach the 'pukkah sahib' stance, and the whole thing just smacks unpleasantly, presently, with American attitudes about 'inferior races', etc.

"There was much else that had a sense of immediacy, in this issue. The night I read *The Individualists*—the best of the series—I heard a U.S. Senator call for an ethical consideration about the question of human organ transplantation, and saw a *televised* lecture on the creation of 'life' (DNA) and the, again, ethical, complication of genetic control. These four subjects were fantasies when I started to read science fiction in 1933, and you can be sure that the adults in my immediate vicinity let me know it. The Paul illustration was breathtaking, and it served admirably on the cover, as well.

"It was a close race for first place and I'm not sure why I gave it to John Scott Campbell (God! Those 1930s dialect indulgences!)—perhaps a more controlled and plotted tale, even though not as showy as Manning. The finale was rather peremptory on *The Individualists,* and the characters just *two*-dimensional."

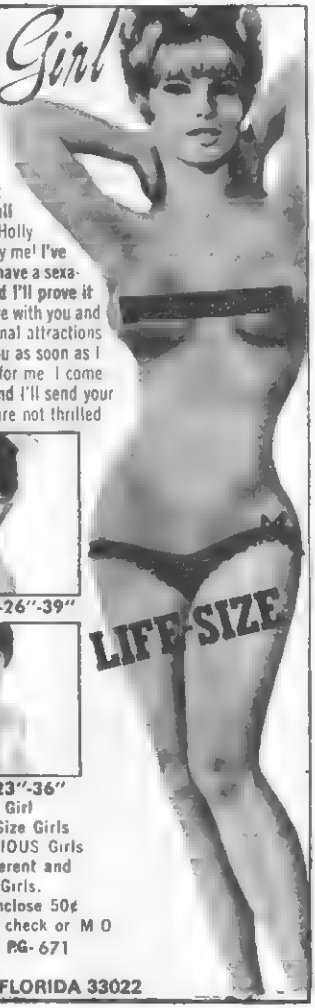
The early returns have nearly all put *The Invulnerable Scourge* in first place, but there's no telling how the race will go as yet. The one which did not—well, I'll let this reader speak for himself.

D. R. Burton writes, from Vermont: "Old-fashioned as it is in some ways, *The Hell Planet* has an astonishingly contemporary feeling projecting revulsion against the attitudes of the superior White Man encountering the simple 'lesser breeds without the law'—attitudes which are by no means dead or even dying, the way I see it. We're trying to legislate them out of existence these days, and I don't think it will work any more than the 'Great Experiment' which was supposed to cure America of drink. Ha! We're still paying dearly for that spell of imbecility. Perhaps organized crime might have gotten a solid foothold here anyway, but this was an open invitation. And from what I hear around, there's ample evidence that people learn nothing whatsoever from experience, because the outcries show that the voters are still trying to get rid of things they consider 'evil' by passing more laws against them.

"I hope you'll be able to obtain more stories from Leslie F. Stone. If she was as imaginatively sharp-sighted as *The Hell Planet* and your comments on her other stories indicates, then never mind whether the science is outdated or the style old-fashioned pulp: the lady is worth reading, and entertaining as well."

These were the first two specific comments that came in on *The Hell Planet,* and—as it often happens—I was fascinated to see such opposite reactions; though in a way Friend Hidley's rejection is almost a compliment, for what he found repellant was exactly what the author was presenting as repulsive . . . For some readers, then, it's obvious that the point of the story makes it impossible for them to be entertained, even though they agree with it. For others, the story has high entertainment value in any case. Needless to say, we did not select this story—nor shall

Party Girl



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#4, Fall 1967: "Master of the Brain", Laurence Manning; "Do Not Fold or Mutilate", William M. Danner; "The Last Shrine", Chester D. Cuthbert; "The Times We Had", Edward D. Hoch; "Master of the Octopus", Edward Olin Weeks, "The City of Spiders", H. Warner Munn.

#5, Winter 1967/68: "The Pygmy Planet", Jack Williamson; "Destroyers", Greg D. Bear; "The City of Sleep", Laurence Manning; "Echo", William F. Temple; "Plane People"; Wallace West.

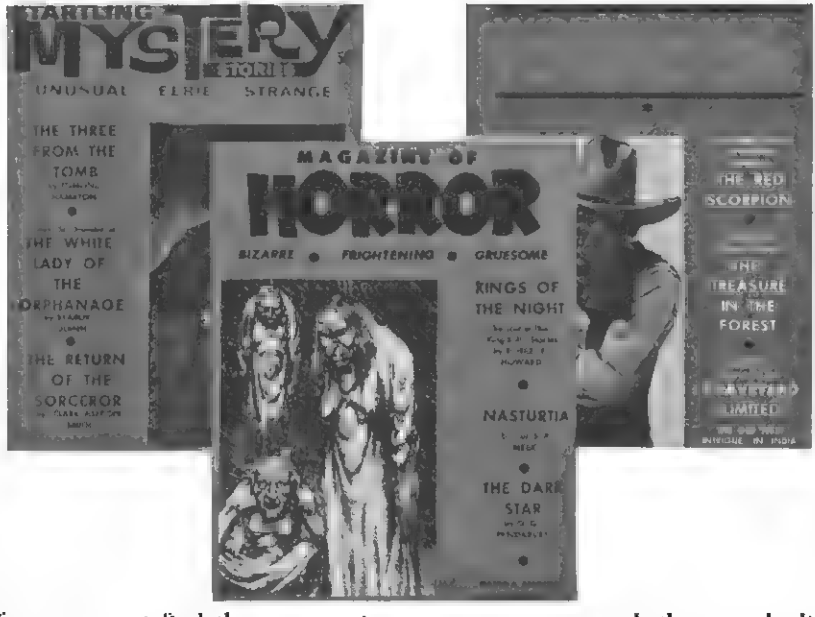
#6, Spring 1968: *The Hell Planet,* Leslie F. Stone; *The Individualists,* Laurence Manning; *More Than One Way,* Burt K. Filer; *The Invulnerable Scourge,* John Scott Campbell.

Order From Page 128

we select any other story—solely for its "message".

M. S. Carnaby writes from Kentucky: "A very good issue, and I liked *The Hell Planet* best of all. The short story by Burt K. Filer was real pleasure and it seems to fit in better with your feature material than some of the other new stories you've m. It's too bad that a really good new story has very little chance of winning first place in the polls, but any author of new material who got second place in the finals ought to feel really complimented. So put down my vote for *More Than One Way,* as second best.

"The other two stories—darn it, I can't decide which seems better. Each one is so good in its own way, and each one has flaws. Manning's should have been longer; what he had was fine, but it almost reads as if the editor cut the ending down because his space was short—or perhaps had the author do it. Campbell's was really worked out, but he didn't understand how to present a character with a thick Cherman oxzzent effectively. It isn't effective when it becomes tedious to read. But then that was the way everyone was writing accents in the pulps those days, I guess. Later on, writers began to realize that you just don't do it that way. You spell a few characteristic words in accent-fashion—just a few—so that the reader gets the feeling, and let the rest come out in proper spelling; then the reader will assume an accent in the actual speaking. Put those two in a tie; both are too good for a last place vote."



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"But his *head,*" the mate protested hysterically. "They couldn't eat that. Why did they cut off his head?"

The headless man sat bolt upright in the boat. He was clothed in stained gray trousers of woolen texture and coarse seaman's shirt of alternating black and white stripes open to the waist. His feet were bare and sun-scorched. One arm, severed at the wrist, dangled forlornly from beside the oarlocks, rising and falling with the slow oily swell.

Don't Miss

THE BRAIN-EATERS
by Frank Belknap Long

in the May issue of

MAGAZINE OF HORROR?

see page 125

We had to wrestle with ourselves seven times before we were able to run *The Invulnerable Scourge* without re-writing it, along those very lines of effective presentation of the thick "Cherman oxzzent".

Robert Silverberg writes: *"Bound to be Read* is a woeful title for a book column, and I much prefer the *Readin' & Writhin'* of yore. But otherwise, the new (#6) *FAMOUS SCIENCE FICTION* looks like a delight. I've only read the Lowndes contributions thus far, and I suspect that as usual they'll outshine the fiction; but your editorial is worth the price of admission."

So far, I've heard from only one other reader (who is also a sterling name in the field) about the title of the book review section, and he was just as enthusiastically in favor as you are opposed. Actually, while the title of the book comments in the old *FUTURE*, etc., was ideal, to my way of thinking, it won't work quite so well in *FAMOUS SCIENCE FICTION* because the approach of the department here is different. *Readin' and Writhin'*, as you may recall, featured Damon Knight and others who found a large percentage of what they weighed in the balance wanting. Conditions were such, at that time, that it was possible to pay for reviews.

Conditions are not the same here. Present conditions do not favor payment for book reviews (I do not mean anyone forbids it; I mean that I cannot feel we ought to spend that way, everything being considered), and I do not know of anyone whom I consider qualified who is willing to

do them without charge—besides which, I feel that any critic on the outside, who is worth publishing, ought to be paid. Thus, since reading time is limited, I cannot comment on very many books. That being the case, I do not bother to comment on those which I do not consider worth bothering with at all; and while some will be considered on a broad level, which allows for criticism rather than reviewing, a good deal will simply be brought to the readers' attention with the note that they are good fun on their own terms. Thus it seems to be that *Bound To Be Read,* is not too bad a title for what actually will be found in the department—but I'm open to conviction otherwise, or suggestions for a better title.

It's heart-warming to receive praise from a discriminating reader, but I do hope that the majority doesn't find the sideshow (editorial contributions) consistently better than the main events! Not that I object to some buying FSF for the editorial comments alone (I myself purchase at least one magazine consistently only for the departments, and in the main, the editorials) but something is sadly wrong if this accounts for a plurality of our circulation.

Dale Tarr writes: "Can you do anything in your magazine to plug the Midwestcon? Here's the information. Nineteenth Annual Midwestcon, June 28, 29, 30, 1968. North Plaza Motel. Banquet, $3.50: smorgasbord; membership, $1.00. Write Lou Tabakow, 3953 St. Johns Terrace, Cincinnati, Ohio 45236, for reservation cards and further particulars."

Tis done. RAWL

Why Was The Dog Shot In The Night?

Farnsworth swept the searchlight around the mongrel's lifeless body. Then he banged the window shut and sat down again, shaking his head as if amazed that we didn't understand.

"I shot it because it reminded me of something not very pleasant, and to get it out of its misery, for it was slowly starving to death. . . . Did any of you ever have the pleasant experience of building a little fortress out of the bones of your friends?"

He didn't wait for an answer. "I saw a man who had that delightful experience," he went on. "The shock was too much for him. It nearly did me in, too . . ." His voice grew tragic. "All this happened out in the Mongolian plains. And it wouldn't have happened if the human lust for money didn't exist."

Don't Miss This Strange Novelet

TIBETAN IMAGE

by Herb Lewis

complete in Issue #3 of

WORLD-WIDE ADVENTURE

see page 127

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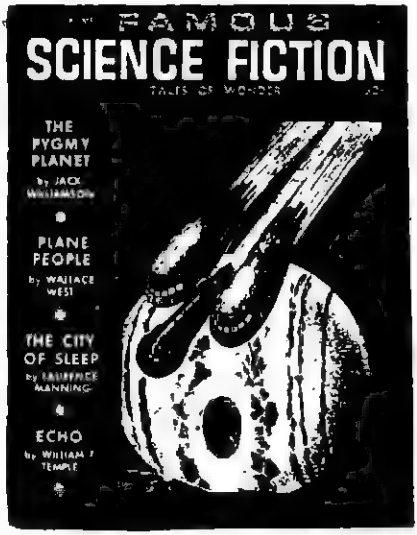

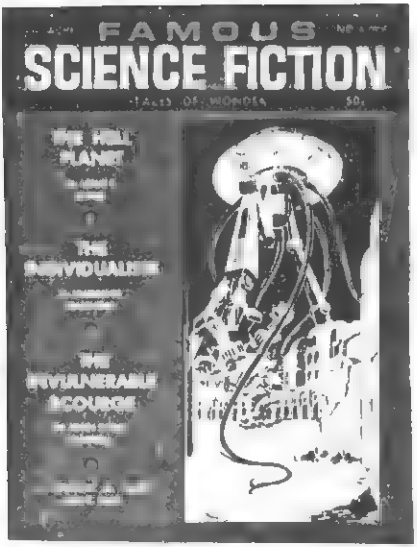

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Please rate the stories in the order of your preference, as many as possible. Ties are always acceptable. If you thought a story was bad (rather than just last place), put an "X" beside it. If you thought a story was truly outstanding, above just first place mark an "O" beside it. (Then the next-best would be "1".)

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Did you find the cover attractive? Yes No

Why has the real truth about ESP been kept secret from you so long?

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FACT: The U.S. and Russia officially reject the concept of mental telepathy, yet secretly pour money and manpower into telepathic experiments.

FACT: The scientific world remains silent, but great universities (including the highly respected Menninger Foundation) delve into reincarnation and psychic phenomena.

FACT: A famous medical school refuses comment after two of its professors compound a witches' ointment from a 16th-century manuscript—and find themselves taking part in a wild, hallucinogenic Satanic orgy!

FACT: The medical profession remains mum about the Siamese physician who uses hypnosis to teach the blind to "see." They keep quiet about the thousands of thoroughly documented cases of psychic healing.

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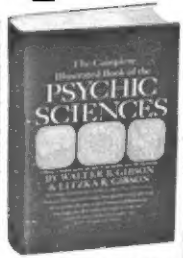

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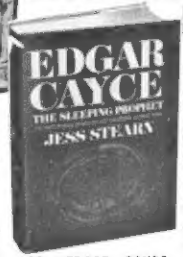

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